

GRAND DUCHY OF BADEN CHARTERED MINES.

AT THE FIRST ORDINARY ANNUAL MEETING of the shareholders, held at Carlsruhe on Thursday, the 30th June, 1853, the following reports and balance sheet were read, approved and adopted, and ordered to be printed:—

GRAND DUCHY OF BADEN CHARTERED NATIVE SILVER AND LEAD MINES.

Carlsruhe, June 30, 1853.—In laying before this meeting of the shareholders a report of the proceedings during the past year, the directors think it right to advert to the circumstances under which the property acquired by them for the company was offered for sale in this country. A German company had been formed about 20 years previously, for the purpose of working the extensive and valuable mines which had much contributed to the prosperity of the inhabitants of the Black Forest down to the close of the last century. At that period the wars between France and Austria compelled the latter to abandon her territories on the Rhine, and with them these mines, which formed a portion of the crown property. It was, however, less the change of sovereignty than the fact that the mines had been worked exclusively by Government, whose officials were withdrawn on the occasion, which occasioned them to go out of work. The German company alluded to started with a nominally large capital, viz., £400,000, but a small portion only was raised, and capital sufficient to open this valuable property was never applied to it. All operations were consequently on a limited scale, and were confined chiefly to the Teufelsgründ, which is a cross lode, or feeder, to one of much greater magnitude, called the Schindler. The results of these workings were such that, while it involved little risk, it excluded all prospect of profit. The property was, however, of a value to justify in the eyes of English miners a totally different mode of dealing with it. It consisted of various groups of mines known and long worked, but in no instance more than a few fms. below the water level. All investigation, both of German and English engineers, pointed to the group of the Schindler, with its cross lodes the Teufelsgründ, Herrenwald, and Knappengründ, as the proper point for commencing operations. Opinions were also nearly unanimous as to the policy of looking to the great Schindler lode itself as the main point of operations, and of regarding the workings in the smaller veins as subsidiary and auxiliary to the great object in view. It was not merely the extent of this great course of ore, which has been worked continuously for nearly an English mile in length, showing, by the occasional width of the old workings, the large deposits which it carried, that led to this decision. The large amount of silver contained in its lead ores, and which exceeds 200 ozs. in the ton of lead, makes the Schindler a most desirable point for the concentration of operations. All the lodes of this set are rich in silver, the Teufelsgründ and Herrenwald lodes containing 108 ozs. in the ton of lead, which is, however, far below the assay of the Schindler ore. There was, at the commencement, strong ground for imagining that the Schindler had been worked out to a great depth below the point of junction between it and the Teufelsgründ, in the Trudert level, a deep adit having been discovered in a neighbouring valley, 60 fms. below that junction. It was, nevertheless, determined to explore the state of the lodes before a general plan for operations could be framed. Such an examination does not appear to have been made by the German Company, whose manager adopted the notion that the Schindler had been worked to a great depth. It was, therefore, under this impression that the property was acquired by the present company, and the necessity for going down upon this lode is assumed in the prospectus. We have now, however, the gratification to announce, that our trial and exploring works have not only proved that a great deal of valuable ore has been left behind in the old workings of the Schindler, but that there is every reason to believe we are now deeper than the old miners had penetrated on this lode at the point of its junction with the Teufelsgründ. The water resulting from the melting of the snow, in April and May, remained, contrary to expectation, in the winze, whence it may be presumed that there are no old workings near that could have acted as a drain. We may, therefore, fairly presume that at this point, which lies nearly one mile from, and 60 fms. above, the other extremity of the Schindler, we are in fresh ground, and may expect a continuance of the rich ores, worth from £40 to £50 per fm., that have been cut. The winze in which this discovery was made is sunk from the level of the Trudert adit on the Teufelsgründ lode, 40 fms. below this lies the Wilhelm adit, which is driven on in the same direction; and between the two a middle gallery is also driving. According as the winze on the Schindler reaches the level of either of these headings, it will be commenced from, to meet the present winze, and in about two years we may expect to have established the communication at this point with the Schindler, at a depth of 40 fms. The other end of the Schindler will, in the meantime, be opened by the restoration of the old cross-cut and a new shaft, which is in progress. During the progress of these works, the rich ores obtained from the Schindler will have to be brought out at the Trudert adit, from which an easy communication has been provided, with new crushers and dressing floors.

From the point of view which your directors, acting under sound scientific and practical advice, have taken, and according to which the Schindler is regarded as the main object of adventure, the valuable ore extracted from the cross vein may be regarded as so much profit, since the adit driven through it would have been necessary even if the hill had been waste rock. From the results of these workings, the directors, therefore, thought themselves justified in declaring a moderate dividend upon the capital advanced by the shareholders last year, for which steps they now request the sanction of the meeting, as well as for a second dividend which they expect in a few months to be able to announce. That this is a safe course, and in no way likely to prejudice the future operations of the mines, is to be known only by the results of the next year's work. The Teufelsgründ lode alone has a length of 200 fms., with a height of 40 fms. Assuming but 1-3d of this mass to be ore ground, and valuing it at the returns of the 17 pitches now at work in the three levels, yielding £7, £11, and £20 per fm., we have a prospect in this cross vein of a profit of £18,000 above the Wilhelm adit, after deducting the cost of extracting. That the prospects of these mines are unusually favourable, will, however, not be doubted, when it is considered that all these workings are but auxiliary and subsidiary to the opening of the great Schindler vein. The time required for opening all these workings and for laying the rails necessary for raising large quantities of ore, has prevented hitherto our producing more than about 30 tons per month. It has also been only recently possible to introduce the English three-shift system, which alone allows of fitting exertion on the part of the miners, combined with due regard to their health and comfort. The directors have much satisfaction in calling the attention of the shareholders to the report of Mr. Lindon, the able manager at the mines, as to the progress of the various works during the year. By this it will be seen, that the English or three-shift system has been, after much difficulty, successfully introduced, and that since this introduction the increased production has been by fully a third, and since the date of that report by one-half as compared with the results obtained under the old system: 350 fms. of iron rails have been laid down, new water-wheels and water-courses constructed, and crushers on the most improved plan, with extensive dressing floors, have just been finished and set to work. A new shaft has been commenced on the Schindler from the surface, and though this and all the other works at the mines have been stopped or impeded during several months by the heavy snows, the progress made in the extensive works necessary to develop the mines has been such as cannot fail to be satisfactory to the shareholders. The London directors, feeling very desirous that the English shareholders should become acquainted in detail with the valuable property of which they are the owners, thought it prudent to comply with a wish expressed by the German authorities; and, in pursuance of the charter, to hold the first general meeting at Carlsruhe. It was hoped that the announcement of this plan would induce many to visit the mines, and join in the minute inspection made by the London board, with the assistance of Prof. Ansted, on Monday 27th inst. They are thus, from personal observation, enabled to express their entire satisfaction with the progress made, and the efficient manner in which the works have been carried on, and to give the most favourable recommendation of their resident manager, Mr. Lindon, as well as to the rich promise and great prospective value of the mines. The great increase in the quantity of silver raised in the ores taken from the last winze opened on the Teufelsgründ lode has raised an expectation that pure silver ores may be found before long. Upon this, as upon other points of a technical nature, the reports of Prof. Ansted and Mr. Lindon give ample details. The heaps of undressed ore, valued at fully £2500, which the new crushers will shortly make available, were shown as at the mouth of two adits, while the quantity of dressed ore was sufficient to furnish the London directors with a third, and the previous year of the charter, for the reasons above stated, convening this first meeting at Carlsruhe, it may be here announced, that the next annual meeting will take place next year in London, of which the requisite notices will be given by advertisement. In conclusion, the directors beg to lay before the shareholders the accounts and balance-sheet of the past year, duly audited, which they trust will meet with their approval, and perhaps induce a desire to bring into work some of the other valuable groups of mines which are the property of the company.

Approved and adopted at the annual general meeting held at Carlsruhe this 30th of June, 1853.

JAMES WALKINSHAW, Chairman of the Meeting.

Grand Duchy of Baden Chartered Mines.—General Balance, May 31st, 1853.

Sales of silver and lead, Teufelsgründ	£48,005 9 6	
Sales of cobalt, Anton	2,824 9 0	
Due to L. Lindon for April and May costs	1,365 10 1	=£52,753 4 11
Purchase of mines, furniture, &c.	£28,480 0 0	
Preliminary expenses	894 12 2	
General charges	1,566 11 1	
Mines, capital account for machinery, purchase of land, rails, repairing buildings, dressing-floors, erecting crushers, &c.	5,191 6 11	
Mines monthly costs, from March 1, 1852, to May, 1853	3,737 18 9	
Security to Baden Government, £10,072 57	839 8 4	
Freight, duty, and charges	45 3 3	
Exchange and commission account	14 1 1	
Dividend on 39,425 shares	1,971 5 0	
Cash on deposit at 4 per cent.	5,200 0 0	
Balance at bankers	4,791 17 1	=£52,753 4 11
Cash on deposit at 4 per cent.	£5,200 0 0	
Interest for six months on ditto	104 0 0	
Balance at bankers	4,791 17 1	
Balance of petty cash in hand	5 3 6	
Amount due for silver and litharge	817 8 4	
Ore at surface	2,240 0 0	
Deposits with Baden Government	839 8 4	=£13,957 17 3
Amount due to L. Lindon for April and May costs	£1,365 10 1	
Amount unpaid of November dividend	431 0 0	
Balance in favour of the company, May 31, 1853.	12,161 7 2	=£13,957 17 3

WORKING AND PRODUCE ACCOUNT.

Sales of silver and lead, Teufelsgründ	£2,824 9 6	
Sales of cobalt, Anton	558 5 4	=£3,382 14 10
Working costs, Teufelsgründ, £5,583 49		
" Anton	290 35	
" Foundry	2019 9	
General charges	1989 57	=£10,482 10 = £873 10 3
Freight and duty	45 3 3	
Balance for dividend	2,463 18 4	=£3,382 14 10
Balance for dividend		
Dividend paid on 39,425 shares	£1,971 5 0	
Dividend unpaid on May 31, 1853	431 0 0	
Balance	61 13 4	=£2,463 18 4

Audited and allowed, JOHN GORE TOWNSEND, FREDERICK FRANKS, Freiburg, June 27, 1853.

Approved and passed at the annual general meeting held at Carlsruhe, this 30th of June, 1853.

JAMES WALKINSHAW, Chairman of Meeting.

Report on the present condition of the Duchy of Baden Mines in the Munsterthal, by Professor ANSTED, F.R.S.

GENTLEMEN: I have the honour to report, that I have again inspected your mines in the Munsterthal, and that the general impressions obtained on a former visit, as to their condition and prospects, are fully confirmed by further investigation, and by the result of the past year's workings. The mining operations may be divided into three classes:—

First, the comparatively dead work in the Teufelsgründ, to prove the Schindler lode; secondly, the winzes and trial works in the Schindler, Teufelsgründ, and Herrenwald lodes respectively; and thirdly, the stapes and pitches in grey ground in the Schindler and Teufelsgründ.

I. Since my last visit, in the spring of last year, the lowest, or Wilhelm level of the Teufelsgründ lode, has been continued for 25 fms. towards the junction with the Schindler. The lode has been found stringy and comparatively poor, but with, no doubt, improvement as the level continues to be driven. Captain Louis Lindon, in his report dated 6th July, the level continues to be driven. In the end driving east in the Wilhelm level, the lode is 18 ft. wide, worth £20 per fm. The ground is rather hard, but offers no unusual difficulties. This end should be carried on with every possible rapidity, and I anticipate a more rapid progress for the ensuing year than the past. There still remain 200 fms. to be driven. To enable this level to be carried to the Schindler more rapidly, a winze has been commenced from the upper (Trudert) level 83 fms. from the Schindler to cut the Wilhelm level at an intermediate point between the present end of that level, and the Schindler lode. This winze is sunk on the lode 134 fms. and there still remain 254 fms. to be done. At the present rate of progress, which has been lately increased, this will probably require about 15 months. As soon as the winze is completed to the required depth, two drifts will be commenced on the lode, one to meet the works in the Wilhelm level on the west, and the other to the Schindler on the east. It may be calculated that from two to three years will be required before the Schindler can be reached on the lowest level. In addition to the work already mentioned, the Wilhelm level has been cleared and widened, and substantial rails have been laid down, which will greatly assist the progress of the level. It will be remembered, that the junction with the Schindler and Teufelsgründ lodes is a distance of 11 fms. from the old level, was, from the first, the great object in re-opening this mine. At the time of my last visit, it appeared probable that the old workings might extend below the Wilhelm level, as an adit had been commenced from another valley to the Schindler, 18 fms. below it. I have great pleasure in now stating that the operations recently commenced by your present manager, by sinking a winze on the Schindler through some old workings, appear to show that the old people have not removed the lode with any regularity below the Trudert level, and render it highly probable that the greater part of the ore in the junction underneath that level (which is 40 fms. above the Wilhelm) still remains to be got. If this is the case, the bucks that will be obtained on reaching the junction from the Wilhelm level cannot fail to be extremely valuable. On the whole, therefore, the prospects of the mine, so far as regards the great object originally set forth, are decidedly better than at the time of my former visit.

II. Of winzes and trial works in the mine there are several that have been undertaken since my last visit. I will briefly enumerate them. In the Wilhelm level, a winze has been commenced from the level to prove the lode depth. It has been commenced near a part of the lode which is stringy and poor, and the result is at present not very favourable. I have little doubt, however, that these strings will come together in the deep, as they have done above, and make a fair quantity of rich ore. A part of the lode in sinking was worth from £12 to £18 per fm. The winze commenced in the Trudert level to cut the Wilhelm level, and communicate with the Schindler has been already mentioned. In sinking this winze, the lode began to show specimens of a peculiar and exceedingly rich and argilliferous ore, at the depth of about 12 fms., and this ore continues and is still visible to the present bottom. About half a ton of dressed ore was obtained from 14 fms. of ground in sinking; and on assay the dressed ore was found to contain 31 per cent. of lead, bearing silver to the extent of upwards of 7400 ozs. to the ton of lead. This was, therefore, a true silver ore, approaching ruby silver in appearance in some small specimens. Judging from the nature of the ore and the appearance of the lode, I think it not unlikely that there may be a drusy cavity containing ruby silver or native silver at no great distance. A winze has been sunk in the Schindler, near to its junction with the Teufelsgründ, in the Trudert level, but a little to the north. After a short distance the winze was found to be old workings, but, being continued, no further indications of the old people were observed. As there is a good deal of water in the old workings near, and the winze being easily kept dry, it appears highly probable that new ground has been reached. In sinking this winze and driving from it, the lode has been extremely good, and although at present not quite so favourable in the drifts, it is still worth nearly £20 per fm., and in the bottom is still better. A new shaft has been commenced, to cut the Schindler near the stream, at some distance to the south. The lode is not yet reached. The ends in the Schindler, on the Trudert level, have been put in a state of repair, but to the north is now discontinued. To the south the level has been cleared, and will, I understand, be immediately proceeded with. The lode appears to have made in courses, and the intervening ground is poor; and the best prospects of the mine are in following these courses downwards.

III. A large number of pitches have been set in the part of the Teufelsgründ lode already opened by the Truderts, Middle, and the Wilhelm levels. These appear to have averaged about £7 per fm. throughout the year, and have thus proved fully equal to the estimate I made of their value at my last visit. The actual quantity of ore raised has not been great, as it should have been, having averaged only 14 tons of dressed ore per month, for the first nine months; but, since the new arrangements made by your present manager, as to setting the pitches working with three shifts of men, and preparing for crushing and dressing on a large scale, the supply has been doubled, and appears likely to increase. The last fortnight's yield was at the rate of 60 tons per month. The pitches in the Schindler are chiefly in the pillars and walls left by the old people in the Trudert level, but include some in the new winze, which look extremely well. Being rich in silver these are very valuable, though apparently poor. There is a considerable extent of grey ground in this level, the nature of which is not yet ascertained. On the 10th inst., two on the Schindler, three winzes in course of sinking, a new shaft from grass in preparation, and four ends being driven. The number of hands in employ is about 400, and admits of increase. The quantity of ore at grass still undressed is estimated at upwards of 3000 tons, expected to yield about 125 tons of dressed ore, worth £2500. There are also about 25 tons of dressed ore ready for smelting, worth about £500. At the last smelting, on the 20th inst., about 15 tons of litharge, and upwards of 1 cwt. of silver were obtained from the amount of the sales being about £700. The dressing-floor and crushing-mill, now nearly completed, will greatly assist the progress of the mine, and enable the works to be carried on for the future with greatly increased activity. The projected arrangements dependent on these improvements are in all respects satisfactory.

Freiburg (Freiburg), June 28, 1853.—My attention, while at the mines, was directed to the important question of opening the other groups of lodes, in addition to those of the Schindler group. It is certainly desirable that some of the more promising of the numerous sets belonging to your company should receive attention, as they may shortly be worked, and only with a view to this, and to the prospect of a continuation of the Schindler lode near Wies, suggested by M. Daub and others as a continuation southward of the Schindler. I consider that a small sum of money would be well spent in proving the condition of this lode, before attempting any extensive operations in relation to it. The same may be said with regard to the Hoffgründ, where a singular group of lodes is known to exist, apparently converging to a point, near which extensive mining operations were formerly carried on from the surface. The works on the Herrenwald, one of the Schindler lodes, appear to show that an important mineral field exists in the Knappengründ, into which the Herrenwald extends to the east. In proving the condition of the Hoffgründ, there can be no question that some exploring works are required in this direction. The Silberberg and Maas are also worthy of notice, as having been formerly worked to a considerable extent, with very favourable results. This appears from the ancient records of the mines, as examined by your late manager, M. Daub. The Anton lode, in the Kitzing valley, was mentioned to me by your manager as one in which some works are being carried on. The plan adopted there of sinking between two converging lodes is decidedly the best that could be suggested. The lodes can be reached by cross-cutting at 10 fms., and the appearance there would probably decide the future progress of the mine. In respect of your present manager, Mr. Lindon, as to the plan of operations for the current year, and consider that the additional works proposed by him are advisable and proper.

D. T. ANSTED.

Freiburg, June 3, 1853.—GENTLEMEN: In reporting to you the general progress made at our mines since the formation of the company, I have great pleasure in stating that our expectations have hitherto been fully realised. The yield of ore for one year, from May 1852, to May 1853, amounts to 106,781 cwt. in a rough state, which produced 240 tons of dressed, worth £20 per fm. During the first nine months of the period, in consequence of the difficulty of getting the German superintendent to adopt the English method of working the mines, our raisings did not average more than 14 tons per month, whereas they have since been increased to upwards of 30 tons. The men who are now becoming accustomed to work on the English system, see the benefit of it, and get through one-third more work than they did formerly. I am happy to inform you that we have now overcome all difficulties, and having considerably increased the number of miners, we may calculate on raising 360 tons of ore from the present workings alone during the next year. The following is the progress made at our mines from May 1852, to May 1853:—In the Wilhelm level we have explored the Teufelsgründ lode in a easterly direction to the extent of 25 fms., about 20 fms. of which have been productive, varying in size from 2 ft. to 4 ft., worth on an average £20 per fm. We have still upwards of 200 fms. to drive on the lode before we reach the Schindler, and at the junction of the two lodes we hope to meet with a rich deposit of ore. In continuing this end, which I regret to state has not been so promising of late, we shall shortly be commenced on the grey ground, which in the levels above yielded very considerable profit, and thus we shall lay open a good road of ore in the back of this level, a winze has been sunk in the bottom of the level for the purpose of proving the Teufelsgründ lode depth. We are 64 fms. down, and the lode continues good. In bottom of winze it is 1 ft. wide, worth £7 per fm., and on the whole looks more promising than in the back of the Wilhelm level. The pitches in the back of the level (six in number) are on an average worth £5 1/2 per fm. 320 fms. of rails have been laid in this level, by which a considerable saving of time, and one-third the expense in bringing out our stuff, has been effected. In the middle level, the end going east has been productive, and has raised a lode a distance of 30 fms., chiefly of grey ground, worth on average £7 1/2 per fm. We have still nearly 200 fms. to drive before reaching the Schindler, and may anticipate some rich backs, as nearly the whole of the ground before us was productive in the upper workings. Thus between the Wilhelm and Middle level, and the latter and the Trudert level, we shall have a length of upwards of 400 fms. of backs, and as there is a height of 12 German lachters (30 English fms.) between each level, this is equal to 4800 square fms. Supposing, therefore, that only one-third of this ground is productive—say, 2500 square fms. at the moderate valuation of only £7 per fm., we may calculate that the worth of these backs alone at £1800. The plan of working in the back of this level, worth on average £28 per fm. In the Trudert level, which has been driven on to the Schindler by the old company, we have commenced sinking a winze down to the Middle level, for the purpose of improving the ventilation in the lower levels, to enable us to drive east and west on the lode from the Middle level, and to effect a communication with the Wilhelm level, from whence the whole of our ore will be carried direct to the crushers on a tramway now in course of construction. The winze is down 11 fms., and I have much pleasure in stating that we have lately made a most important and I trust valuable discovery in this connection: during the course of last month the lode began to show specimens of exceedingly rich argilliferous ore, known in this country by the name of "Rothgiltig Erz," about 3 cwt. of this ore have been raised, and the assays made show it to contain upwards of 30 per cent. of lead, which latter has 2 1/2 per cent. of pure silver. At a depth of 10 fms. we are driving east and west on the lode, and we have every reason to expect a good yield of ore from the backs of these workings. The pitches in the back of this level (six in number) average £13 per fm. In this level we have also sunk a winze on the Schindler, for the purpose of proving the lode, and at the same time of ascertaining the nature of the workings in depth. After sinking 1 fm. we struck an old level, but the lode untouched in bottom of winze, we continued sinking, and have now attained a depth of 8 fms. without finding any indications of the old men. The lode in the winze when we commenced sinking was not more than 2 in. wide, but immediately we were through the old workings it increased in size, and varied as we got down, from 6 to 20 in., worth on an average £30 per fm. For the last two months we have been forced to suspend operations here, in consequence of the influx of water whilst the snow was thawing, but we resumed work this month. We have raised some good ore from the back of the Schindler in the Trudert level, in a northerly direction. On the surface we have commenced sinking an engine shaft on the Schindler lode. The men are down 11 fms., but make slow progress, owing to the compact nature of the ground. We have still 37 fms. to sink before reaching the level of an adit which was made by the ancients, and below which we confidently expect to find the lode untouched. We have re-opened and timbered 100 fms. of this old adit, and hope to complete the communication between it and our engine-shaft during the current year. The Herrenwald Mine has not been worked the past year for want of a sufficient number of

hands, but we have now commenced driving east on the lode from a level which has been driven by the old company, but was abandoned by them for the want of sufficient means to carry on the undertaking. The lode is 1 ft. wide, of promising appearance, and the end we are working will lead us directly under some grey ground that comes to grass 30 fms. above us, and will bring us to the junction of the Herrenwald and Knappengründ lodes, where we hope to meet with a most valuable deposit of ore. At the Anton mine, in the Kitzingthal we were employed for several months in furling the water from the winze, for the purpose of cross-cutting from the bottom of it in the direction of the Heinrich lode. This lode has now been cut, and bears a likely appearance, although without ore at the point where we reached it. Our main object in this mine is to arrive at the junction of the two lodes Heinrich and Anton, in depth, for which purpose a winze has been commenced directly between them. We have still 120 ft. to sink, and I shall be better able to judge of the value of this mine when this object has been attained. In the Munsterthal we have a heap of ore on surface which is worth nearly £2000, and will be considerably increased by the end of the month. Considering the rapidly increasing importance of our mines, and with a large stock of ore on hand, the erection of the crushers, and laying out of the dressing-floors, on the newest and most approved principles, and the introduction in consequence of the system of dressing the ores adopted in England, must be looked upon as of very great importance, for not only shall we get our ores ready for the foundry in less time, and at a saving of at least one-half the former expense, but they will be better dressed, and can, therefore, be more economically smelted than heretofore. The following are the works we propose commencing during the current year, in addition to those now in operation:—As soon as the winze under the Wilhelm level is down 10 fms., we shall drive east and west on the lode, and thus lay open a considerable extent of new backs. We shall continue sinking the winze, in order to prove the lode in depth, as long as the water will allow. On reaching the middle level with the winze now sinking from the Trudert level, and which will require about four months more to complete, we shall drive both ways on the lode. This winze will bisect the ground 10 German lachters (upwards of 16 fms.) in sections of the present end, and will enable us to arrive at the junction of the Schindler and Teufelsgründ lodes with the least possible delay; whilst it will, at the same time, be laying open a vast extent of new ground. In addition to the workings now set on the Schindler, we propose sinking on the lode about 50 to 90 fms. south of our present winze in the Trudert level. Should we find that the workings have not been carried on to any extent below the level in this direction, which the quantity of water that accumulates in the bottom of the level leads me to suppose, we shall at a convenient depth (say 10 fms.) drive both ways on the lode; north towards our present winze, and south towards the valley near which our engine-shaft is being sunk. There is also some good ore which was left by the ancients in the back of the lode in the Trudert level, which we intend working on tribute as soon as fresh lands can be obtained. In order to facilitate these workings, we intend laying down rails in this level. From the engine-shaft, when we have reached the level of the Wilhelm level, we shall cross-cut on the lode for the purpose of laying it open in this direction. At the Herrenwald mine we intend opening the old level, from which it appears a winze has been sunk to the depth of only 2 fms. (now full of water). We shall also continue driving east in the end of the new level, which will bring us under some grey ground that crops out at grass, as already stated, and we shall also continue the end west to wards the Schindler lode. In conclusion, I am happy to inform you that we have established a market for the sale of our lead and litharge at considerably improved prices, and that we have booked orders for the entire produce of our foundry for the next six months.

LOUIS LINDON, To the directors of the Grand Duchy of Baden Chartered Mines, London.

ST. CYRES SILVER-LEAD MINE.

IN THE COUNTY OF DEVON.

In 5000 parts, or shares, of £3 each, £2 of which to be paid on allotment.

On the "COST-BOOK PRINCIPLE."

COMMITTEE OF MANAGEMENT.

Sir JOHN MALCOLM, Bart., Southwick-street, Hyde-park; and Balbezie, Fife-shire.

HENRY MOSS, Esq., Church-court, Clement's-lane, City.

HENRY S. WILBY, Esq., 14, Cambridge-terrace, Hyde-park, Barrister-at-law.

(The Local Committee to be chosen at the first meeting of shareholders.)

BANKERS—London: Messrs. Roberts, Carter, and Co.; Exeter: Messrs. Milford, Baker, and Co.

CONSULTING ENGINEER—C. B. BENNETT, Esq., C.E., Ely-place, Holborn.

SECRETARY—S. A. Bateman, Esq.

LOCAL PURCHASER—Messrs. May and Bidwell, Exeter.

OFFICES.—12, KING WILLIAM STREET, MANSION HOUSE, CITY.

This mine is situated in the parish of Newton St. Cyres, in the County of Devon, about four miles from Exeter, and held under lease from John Quicke, Esq., for a term of 21 years, at a royalty of 1-15th.

The set is very extensive, being nearly a mile square, and extends over a surface of 600 acres, in a rich and valuable mineralised district, with strata highly congenial for the production of silver-lead ores.

About 80 years since two adits were driven; the shallow adit about 150 fms., and the deep adit upwards of 200 fms. in length; and nine air and other shafts were sunk, and several tons of silver-lead ore raised and sold; but the workings were stopped for want of the necessary machinery to work the mine advantageously, which can now be easily and cheaply procured.

The mine was about 30 years since worked by some local parties, who embarked in the concern, and a quantity of lead ore, rich for silver, were raised; but want of means to erect machinery again stopped operations.

The adit has been completely cleared to the shaft, which had been sunk 10 fathoms below this level, showing that the ancient miners cleared out all the ore as far as they could obtain it without machinery; and from the great size of the lode, the rich stores of ore now being taken from its remains, and other proofs of its value and importance, there is no doubt that it is a most valuable property.

The proximity of this mine to the City of Exeter, and the good public roads, and the railway running close to the property, are recommendations which parties acquainted with mining cannot fail to observe will make the transit of ores and materials speedy and cheap.

The capital proposed to be raised, after payment for the lease and the workings already done, will be quite ample for effectually working the mine, which will, it is confidently stated, early and handsomely remunerate the shareholders for their outlay.

As many applications for shares have already been received from the neighbourhood of Exeter, parties desirous of having shares allotted must apply in the usual manner to the Secretary, or the local purchaser, on or before the 25th day of July, after which day no application will be received. A reference to a banker, one of the committee, or one of the officers of the company, will be absolutely necessary.

Extract from the report of Capt. MARTIN.

Jan. 28, 1853.—The set is a very extensive one, about a mile square, in the clay-slate formation, and was worked about 80 years since. Two adits were driven and many shafts sunk, and I calculate that nearly £2000 were spent in doing this work, which will be of essential service to future adventurers. Quantities of staff are found on the set, and I discovered many excellent specimens of blende, quartz, and lead among the barrows brought from the lode. If the levels were cleared I should be able to judge of the character of the lode; but there can be no doubt that deposits of lead have been found, and that the workings were stopped for the want of means only. The dunes are fair and liberal, and you have the advantage of public roads close to your future workings. I have no hesitation in recommending an efficient trial of this set. Many shafts have been driven, and the set is very extensive, and the adit shafts are very regular, and when this is done to try on the different branches, and cross-cut in every place where it may be thought expedient, in order to fix on the most proper place for an engine. On the whole, I consider this a very promising concern, and, well-managed, I have no doubt it will soon rival Wheal Exmouth.

W. P. NICHOLLS.

P. S.—There are various stores of lead and quartz, with spots of jacks and lead to be found in and near the old workings, which prove it to be among close-grained silver-lead, some specimens of which I send you per bearer.

Since the above date, Capt. Nicholls has been engaged in clearing the mine, and the following extracts from recent letters will show the progress that has been made:—

Newton St. Cyres Mine, May 21.—Yesterday we discovered a very kindly lode in the end of the shaft, about 22 fms. below the surface, and broke some good stores of lead. This lode is about 20 in. wide, composed of quartz, barytes, and good spots of lead, bearing a pretty flooken alongside of it. Indications that we are certainly in the vicinity of a good lode.

May 26.—I send a few stones from the lode; it still continues in the shaft, now 35 fms. below the surface, it is a good 3 ft. thick, composed of quartz, barytes, and some lead, carrying a beautiful flooken with it. The good stuff is about 1 ft. in a fm. It appears as if the lode now in the shaft is one of the principal lodes the mine has been worked on, as the ground above has been taken away. Nothing can be done on this till the shaft has been cleared and secured.

May 28.—We have hauled to the deep adit. We have now good air, and the water will run off, but there are still about 20 fms. of the deep adit to clear and secure. We have begun to clear and secure the level east on the lode. It is plainly apparent that the ancient or first party had a good mine, but could not follow it down for the want of machinery.

June 11.—It clearly appears now that the north adit was driven first, and the mine worked at that level, and finding the lode good, in the absence of machinery, they were induced to bring up the west adit about 230 fms. at an enormous expense, and only gain 2 fms. in depth, the north adit being 25 fms. 1 ft. below the surface, and the deep western adit only 27 fms. 1 ft. or thereabouts. We are aware that I have always been really partial to Wheal Exmouth, but now, on taking everything into consideration, in order to clear this mine to Exmouth, only, as I said before, there must be time to go to Exmouth, and have every convenience (except water,) the railway close at hand, in fact, lead, bar, and oak in abundance on the estate

Original Correspondence.

ON THE LAWS AND PHENOMENA AFFECTING THE DISTRIBUTION OF METALLIFEROUS DEPOSITS.

SIR,—The vast importance now so generally accorded to mining as one of our most pregnant national interests, and the physical and incidental peculiarities characterising it as a practical and remunerative pursuit, and more or less affecting its successful progress, renders especially welcome every ray of light, however feeble, that can be cast upon its, as yet, but dubious pathways. The philosopher who studies the multifarious objects which everywhere adorn the fair face of Nature, is inevitably led to the conclusion, that they owe their mysterious development to certain definite immutable laws. So palpable, indeed, is the general impress of this truth that the observant mind, however unlettered, can scarcely fail to recognise it. The poor miner even, whose lonely avocations are carried on amid the secret recesses of the earth, has his attention frequently drawn to startling manifestations of cause and effect—beauty, utility, and perfection. And as these natural attributes present themselves to his notice, how eminently calculated are they to excite his curiosity, stimulate his reasoning faculties, and irresistibly lead him to shrewd conceptions, or perhaps conclusions, that where apparent confusion reigned around, all is, in reality, design and order, abounding in wisdom and beneficence, and presenting the most unmistakable evidences of prospective regard for the requirements and the welfare of mankind.

A vivid and lively consciousness of these grand truths naturally begets a praiseworthy spirit of enquiry, and the awakened mind eagerly endeavours to discover and define the secret processes of the fundamental laws, which—though by silent and insensible action—are continually producing around, above, beneath us, the most marvellous and magnificent results. Our present knowledge of the acting principles of such of them as pervade the geognostic and mineralogical world, although necessarily so vague and imperfect, is eminently calculated to afford important assistance to the practical miner. The mine captains of Cornwall particularly, and who, as a body, are conspicuous for their habits of acute observation and their intelligence, have already learned to appreciate the importance of these natural guides, and not unfrequently avail themselves of them with the happiest effects. The existence, for instance, of "metalliferous channels" of ground, and of the magnetic currents which permeate them, are, perhaps, amongst the most prominent of the natural phenomena, which their varied and constant experience has induced them to value and entertain as received doctrines. It would seem, however, from some observations which have appeared in the *Mining Journal* from your Cornish correspondents, during the last few weeks, that but an imperfect knowledge exists as to the distinctive appearances characterising metalliferous from non-metalliferous channels. Capt. Pill, in reference to the existence of productive or unproductive mines, as emanating from the nature of the bounding strata, says—he thinks that strata in poor mines do not agree in their general character with those of good ones. And the next week a "Cornish Miner" very pertinently requests him to define what are the minute and important features (in the bounding rocks) that are so peculiar both to good and poor mine: a question, at least as regards the external appearances or constituent parts of such respective rocks, much easier to ask than to satisfactorily answer. In fact, we are inclined to suspect that to the eye the positive presence and width of these metalliferous channels is best, if not alone, to be determined by their ascertained effects, as manifested by the parallel bunches of ore in a series of east and west lodes, intersecting at right angles the said metalliferous run or channel of rock. Rare, indeed, must be the case where the presence of the metallic matter itself would form so visible a component of the rock as to determine, at sight, its true metalliferous character.

It is now ascertained that the very earths of which rocks are composed are of a metallic nature, and, therefore, a given rock, or even formation, may, without the visible exhibition of one single metallic molecule, be, nevertheless, rich in the elementary principles which constitute the formation of the metallic ores. The fact, however, is unquestionable that some rocks are barren or non-metalliferous; whilst others, and even some strata of the same rock, are rich in metallic matter, and hence (from their proved effects probably) called by the miners *bearing measures*. Even the quality of the ore often varies with that of the rock through which it passes—an additional proof that lodes owe their metallic contents to the bounding rocks, and that such ores were neither poured in from above, nor eliminated from below. As touching this interesting question, an eminent, but in relation to geological science, early authority suggests that metallic matter was diffused through different rocks, according to their elective affinity, and separated from them by voltaic electricity; or the strata may not like a series of plates in the voltaic pile, separating and secreting metallic matter from its different combinations.

Whatever may in reality be the natural processes which generate and distribute the mineral masses in the great laboratory of the earth, actual observation, experiment, and the deductions of science, have alike very satisfactorily demonstrated that magnetism is there—a grand, transposing, ever-acting, all-pervading principle. Its provident and mighty-modifying effects are most apparent in the economic and mechanical structure of the primary base or great framework of the globe. The universal laminar structure of the stratiform rocks, as exhibited in their vertical laminae, running in a north and south direction, is one of the most palpable examples of the meridional action and transposing powers of the ever-circulating magnetic currents; and as both experiment and natural evidence warrant the belief that the metallic solutions of the bounding rocks are deposited in the "lodes of fracture" by the action of this subtle agent in its course from south to north, and as it is known that the intervention of the slightest non-conducting substance in the cleavage planes is sufficient to turn the course of the magnetic current, it must appear obvious that a lode intersecting the laminae in question at right or oblique angles is a geognostic condition highly favourable to the local accumulation of mineral, tantamount, perhaps, to the importance now commonly accorded to the angular position of lodes. The practical explorer has, in short, in this general principle a clue to these secret workings of Nature—a grand natural auxiliary, which, when assiduously and skilfully consulted, will tend ever to open up new fields of discovery, and lead to accumulated advantages of the first importance to mining enterprise. Its genial and productive effects are often especially manifested in its relation to such local conditions as, the juncture of primary masses and porphyritic beds with killas, limestone, &c.; the intersections of cross-courses, occurrences of flookans, angular lodes, and moist impermeable rocks, presenting thus much convincing evidence of the latent combined causes which influence the distribution of metallic deposits, and, in a measure, dispelling the great uncertainty and hazard so commonly attributed to mining operations. It cannot, however, be denied that both the practical miner and scientific investigator, in the course of their actual labours, not unfrequently encounter such strange freaks of nature and startling anomalies, as to shake their confidence in the most admissible and cherished code of rules, and to set at defiance every effort of man to reduce the art of geognostic investigation and mining to a certain system. But such local impediments will rather stimulate than discourage the inquirer, who takes a wide and comprehensive view of the grand operations of nature, and who, in so doing, is right well assured that he is in search of the secrets and the *modus operandi* of a system which does really exist, and in all that admirable order and perfection which invariably distinguishes the glorious works of Creation.

Diversity is one of the most marked attributes of Nature's operations, and we see it exhibited in endless variety, without any violation of the primary laws of Nature. As regards metallic veins, they not unfrequently contain various ores at various depths; indeed, the very matrix or gangue of a vein will vary as it passes through different strata. And it is believed that certain local causes influence the crystallisation of minerals in different districts, disposing them to take peculiar secondary forms, which may be considered as appropriate to the minerals of that district. These dispositions of Nature should ever be borne in mind by the mineral explorer, for in distant localities or districts he will often have occasion to notice a marked difference in the character and appearance of what are commonly considered as the leading or predominating indications of the existence of rich mineral deposits. What the experience of the miner has justly led him to appreciate as an infallible indication in his own particular district, may in a distant one, be no guide at all, or none on which any real dependence could be placed. The *gossans*, for instance, are rightly esteemed by Cornish miners as first-rate indications, almost certain to lead down eventually to vast and valuable deposits of ores. Indeed, they are often such predominating features in the Cornish lodes as nearly to fill them to a depth of 30, 50, or more fathoms. As a general rule, however

(subject, of course to these local modifications), the presence of gossans are most favourable indications, as commonly constituting the exuded hydrous oxides and sulphates of the metallic ores existing in the lower regions of the lode. Nevertheless, gossans, even in the most productive mines, in some countries, are altogether absent, or nearly so.

The miner, of ordinary intelligence, accustomed to delve in the mines of a particular tract of country, often exhibits a sort of instinctive knowledge of the precise matrix of the lode, and the adjacent rocks, which are therein, the true indexes of the presence of metallic riches. For example, though he cannot distinguish which of the bounding strata are so richly saturated with the metallic salts as to entitle them to the designation of "metalliferous channels," he has simply, by experience and close observation, learned to judge of their local presence by the rich deposits he finds opposite to, and corresponding with the width of, such channels. The true character of the feeding rock being thus ascertained, he has only further to mark what are its exact mineralogical appearances, &c., and compare it with the other rocks or strata as a means of discovering, analogously, other bunches or deposits in the same lode or neighbourhood. As a general rule, this, in a given district, may be of much practical utility, but is, nevertheless, subject to obvious exceptions. "Metalliferous channels" are, doubtless, extremely arbitrary as to their run and dimensions; a narrow course—say, of ground studded with valuable mines over an extent of miles in length—may, in a general sense, correctly enough, be designated a "metalliferous channel," but, nevertheless, it would be subject to be interspersed with innumerable barren channels, and as is often tested by the occurrence also of many a poor mine. Hence, notwithstanding our absolute knowledge of directing and encouraging phenomena, we are ever and anon reminded of its present limits, and of the necessity of proceeding in our practical labours with all due caution and circumspection. We have intimated that wide and comprehensive views of the natural phenomena bearing upon practical mining are indispensable to a just and competent judgment of the same, and their successful application to actual general explorations and scientific investigations, and we may reasonably hope that such desiderata will be pretty effectively supplied by the enquiring and persevering spirit which now everywhere animates the mining world; a careful comparison and collation of natural facts and discoveries, derived thus from different and distant localities, cannot fail to furnish new data of the utmost import towards rendering clear and intelligible much that is now proverbial for its puzzling and inexplicable character. In a communication of this kind it has been deemed impossible to offer more than a few very general remarks, and which, though necessarily but crude and imperfect, it is hoped may at least furnish suggestive matter, or even be of some little service to the important interest you so assiduously represent.—JOSEPH HOLDSWORTH: London, July 12.

COMBUSTION AND ITS USES.

SIR,—I have been greatly pleased by the elegant precision with which Mr. C. Wye Williams demonstrates, in his paper under publication, the true theory of combustion, and the inefficiency of hot air to promote it; and it is, of course, particularly gratifying to find my rough practical remarks on the same subject supported by such a detail of science. I wish Mr. Williams could be prevailed on to turn his acute power of research to examine the realisation of the expansive power of steam in Mr. Craddock's perfected engines. One of your correspondents, so far as I can yet understand the scope of his argument, attacks the general principle that expansion is an economical power, but we may safely conclude he will be unable to prove that a multiple is not more than a unit—in fact, the economy of expansion, as an invaluable power, has been so long and extensively admitted by all authorities, that we may assume its authenticity stands on unassailable ground, and the only real question remaining to decide is, how far this power has been rendered more safely, more economically, and more generally available, by Mr. Craddock's constructions; how far, in short, a great substantial desideratum has been practically realised by a new boiler, a new condenser, new arrangements of valves, and a complete body of scientific mechanism directed to this particular end. Mr. Williams is, from his position, deeply interested in the achievement of the problem, and he is capable of bringing to the task of examination, rare advantages of scientific attainment; an unusual amount of combined qualification. It is very rarely indeed that directors of navigation, or any other companies, are men of science; on the contrary, some of the first men of business I know have a horror of science—they hate the very name of it, and I must admit, too often on very sufficient grounds. The mode in which forms of science are now chattered over in the abstract as a mere amusement, or as a *quid pro quo*, so many *ad captandum* experiments, or so many words for so many shillings paid at a lecture-room door, or as a permanent salary for speaking, leads to a confusion and insufficiency of principle, well illustrated by the late smoke controversy; and when one of these rapidly-made philosophers succeeds in opening the purse-strings of a capitalist, the result is laid at the door of poor Science, who unluckily had nothing whatever to do with the catastrophe. These truly, in every sense, *abstract* men of science are like the spiders who spin the gossamer. So long as the web floats in the air, removed from the matter of the earth, it plays with great beauty and undulates in any form at the will of the spinner, but substantial contact immediately tears it in pieces: a silk purse from a sow's ear is a more useful commodity than a purse of cobwebs. So much of this kind of spinning is constantly on foot, that sound men, who really could promote sound novelties, get afraid of them, and venture on the path of improvement with a very slow and timid step. From the striking coincidence of opinion, in opposition to ordinary views, which has lately appeared between Mr. Williams and myself, on the theory of combustion, I am impelled to hope for an equal agreement on the still more important question of the uses of combustion, for I am assured his authority, extensive as it is, might be increased a thousandfold by directing his refined research to the result of the application of his own principles in the boilers of the universal condensing engine. I never knew a man of real scientific acumen who did not make the recognition of merit in others his principal delight, as being, in fact, a main part of the promotion of truth, scarcely less important than its actual investigation. Whoever advances truth in a new guise, becomes like the wearer of a new fashion; he is stared at or pelted by the mob on his first appearance, though in a very short time the most active railers are the most eager to imitate. Here is a new form of boiler and condenser, so intrinsically valuable that they impart as much additional power to the steam-engine as an ordinary man would receive by transformation to a Briareus; yet the mere prejudice of fashion, combined with the interests of those who make the present comparatively weak and dangerous engines, have kept back for 10 years these improvements, in that dormant condition of which we need only say that all other great improvements have been doomed to suffer it for a season. Now, I cannot but think that Mr. C. Wye Williams, from his position, his opportunities, and his scientific light, is the very man to scatter this sleepy darkness. That the voyage from Liverpool to New York may be immediately made in five days with as great ease as it is now done in ten, and with far greater safety, convenience, and economy is a demonstrable certainty, which Mr. Williams would recognise on the slightest examination; and I am entirely deceived in his character if he could permit any minor consideration to interfere with the assertion of so great a fact; on the contrary, to a sincere lover of truth, the difficulties to overcome are the strongest stimulus to exertion; and it is a fact that at no time, on no subject in the history of the world, were there difficulties so enormous to be overcome as those which at this day oppose any radical improvement, not in the minute details of mechanism, but in the organic structure of the steam-engine.

Take any steam navigation company, our best and most successful—for instance, the Oriental and Peninsular: contemplate for a moment the chances of success in offering to their notice an invention which would entail not the mere change of a screw or a paddle, a new shape of starting gear, or a new shape of flues in the boiler, but a radical upheaval, turning their noble vessels inside out, and their boilers and machinery bodily to the founder and the scrap dealer—how is it possible to attack men effectually upon such a change. As I have said already, directors in general make no pretence to science, but rather eschew it—in fact, the interests in their management are too weighty to permit of any trifling with the mistakes of science. They choose the safer course of using what has been best approved by experience, and the condition of their concern is the best proof of the sound judgment of the selection. The practical arrangement and conduct of the machines is vested with the engineer, and their efficacy beyond that of any other company is again a proof of his ability, whose very name, indeed, shows him to be without spot or blemish. Now, suppose the directors to be even brought so far as seriously to consider a trial of one of Craddock's engines, the first step must be to consult the engineer; what then would be encountered at the outset? A patent boiler,

the property of that engineer, very efficacious with the best coals, and daily extending in use, something heavier than ordinary boilers, but saving more than an equivalent in coal. Is it not a serious consideration to ask a patentee to recommend a boiler which will make his own a dead letter; and, besides that, so entirely disorganise his whole system of mechanics, that the mere proposal would be sufficient to turn even a lamb into a lion. But assume the difficulty of the boiler got over, by the company giving their engineer—say 10,000*l.*, as a compensation for the loss of it, and which might be well worth while, in order to save in the whole fleet 1000 tons of coal per day, with a corresponding increase of paying freight, the engine makers would next appear to be dealt with by the directors. Now, what would Messrs. Penn say? What would Macgregor and Laird say? What, in fact, could any of the makers of their engines say? The alteration in their shops, habits, and calculations would be so great, that it would be just as reasonable to ask them at once to make caloric engines. What is required to do Mr. Craddock justice is a director or directors who understand the whole science of combustion and evaporation, chemically and mechanically, better than those they employ. This is a very hard requirement, yet it is only to such a direction that we can look for the commanding introduction to immediate use of improvements, which nevertheless stride as far beyond the Watt engine as this has transcended the primitive development of the wind-mill and the water-wheel. The very perfection of the present steam-engine, and the extent of its adoption, form the greatest barrier to the progress of its further improvement. But must we therefore despair; have not I, who have no interest, shown earnestness enough to stimulate those who have an interest to examine into what concerns them? What port is more interested in steam navigation than Liverpool; let its leading men investigate these facts on public grounds, and who better qualified than Mr. C. Wye Williams to preside over the enquiry? There is Mr. Fairbairn not far off to assist him, who well understands the value of the expansive use of steam—in fact, a competent pupil of his inspected these boilers and engines on behalf of the Australian Mail Company, and made a proper report, which had the board acted on, would have placed that adventure in a position as enviable as it is now the reverse—but these engines were not wanted for that company. Nay, my late father had old friends in Liverpool who I think would not be slow to aid his son in forwarding a great national development, and rescuing merit not only from the naturally inveterate opposition of rivals in trade, but from the convoluted intrigues of men of the best authenticated cunning in England. The value of these engines is better known than the public at large has any conception. Could Mr. Craddock have been cajoled or threatened, under that hypocrisy of benevolence which characterises our age, to surrender his property and his reputation to the hands of strangers, his engines at Woolwich and at Spithead would perhaps this season have divided attraction with the camp at Chobham; the public might have been permitted to inspect them in action at the Great Exhibition, and the present forlorn hope of humanity in the Arctic seas might have blessed the aid of their economy in the dreary search. DAVID MUSHET.

June 27.

THE GREAT LONDON DRAINAGE BILL.

SIR,—You are aware that a bill under the above title was introduced into Parliament this session, by which it was proposed to accomplish the following objects:—"To afford means for effectually draining the metropolis; to preserve the Thames from the pollution at present passing into it; and to collect the contents of the sewers for agricultural purposes."

These objects were to be secured by the construction of a tunnel sewer on each side of the Thames, passing under and intercepting the contents of the present sewers, conveying the same to a distance from the metropolis, and there, by deodorizing and precipitating it, to form an inodorous and dry manure. This bill was referred to a select committee, before whom, during an investigation of seven days, the following facts were proved by evidence:—That the proposed tunnel sewers were capable of carrying off 37 millions of cubic feet of sewage per diem, whilst the daily amount of sewage, according to the highest estimate, is only 12 millions of cubic feet. That by these tunnel sewers, and by no other means, can the whole of the low-lying districts of the metropolis be efficiently drained. That for the ordinary rain-fall ample provision is made, the flushing or scouring power of which will carry down into the tunnel-sewers all the foul matter that may be in the general sewers, leaving them clean channels through which any amount of storm-water will afterwards pass into the Thames. That the proposed terminal works were sufficient for the purpose, and that the process of manufacturing the manure was so inoffensive, as to admit of the works terminating at the River Lea, 34 miles short of the distance proposed by the plan. That the tunnels could be constructed without interfering with the traffic of the thoroughfares under which they were intended to pass, and that the proposed tunnel-sewers, branch sewers, and works, could be efficiently constructed for the sum of 900,000*l.*—eminent contractors being fully prepared to undertake the contract. The minutes of evidence &c., before the committee, were ordered to be printed, on the motion of the chairman, reference to which will confirm the foregoing statements. This important public work originating with, and now proposed to be carried out by, public enterprise, and in all reasonable probability without charge to the ratepayers, could not fail to confer such incalculable advantages upon the metropolis, that it was deemed reasonable that the parishes benefitted should share the risk in a small degree; a clause was therefore inserted in the bill, providing that they were to contribute towards a dividend of 3 per cent. on the outlay (not exceeding 900,000*l.*), in so far as the sale of the manure failed to produce that rate of interest. This guarantee was to extend only over 25 years, and to be altogether extinguished whenever the profit amounted to 3 per cent. Under this clause the greatest amount which, under any circumstances, could be payable by the metropolis would be 27,000*l.* per annum for 25 years, equal to a present value of 450,000*l.*, or one-half the cost of the works. The parishes—the parties really interested—did not appear against the bill in committee, which was opposed only by the representatives of the two Commissioners of Sewers, and on them, therefore, will rest the responsibility of any delay that may arise in carrying out this work, or of devising some better plan for the drainage of the metropolis, and a more advantageous method of raising the capital.

Royal Exchange, July 11.

W. C. STEPHENS.

PREVENTION OF COLLIERY ACCIDENTS.

SIR,—It has occurred to me that for the prevention of death by suffocation in coal mines, tubes might be carried down like those used for gas-lights, which ought to be closed against the entrance of air and gases within the mine, but which must be accessible to the men, and carry a sufficiency of fresh air to them by means of mouth-pieces, enclosing valves which open by suction. These tubes ought to be laid along the passages generally used, branching off to wherever they may be wanted. The mouth-pieces ought to be attached at intervals of about 3 yards. Many of the men would, on the occurrence of an accident, be able to reach the shaft by going from one mouth-piece to another, while others might reach those who could not do so unassisted. Air-bags, with similar mouth-pieces, might be supplied to the men when being hoisted up. The suction necessary for the purpose indicated would require no greater effort than that in smoking tobacco. For those who wish to have an idea of the probable cost, I beg to add that so far as I can form an estimate, I consider that 1*d.* per week from each man employed in the mine, would pay 5 per cent. interest on the money laid out for the purpose.

Oldham, July 9.

C. SCHIELE.

MINING IN UNCONGENIAL STRATA.

SIR,—I have with very great pleasure read the letters in your valuable *Journal* treating on the geological features of the earth, and more particularly those bringing out practical facts, such as the communications of Messrs. Ennor, Pill, and others. Mr. Ennor's letter of the 4th of June, touching on the component parts of granite, would have been very interesting if followed up. It is to be regretted that Mr. Cornish should have debated in the way he did; it only tended to turn to a subject not in the least connected with the basis of Mr. Ennor's letter, and must ultimately end in nothing more than the substantiation of Mr. Ennor's fact statement, that the genuine granite of Devon and Cornwall terminated near the River Teign. This Mr. Cornish admits: his question asked last week tends only to show that he (Mr. Cornish) is neither theoretical nor practical. If the former, he would have known that theorists argue that granite is the primitive rock, and in that case it must have taken the field first; or, if the latter, he would have known that the Cornish and Devon granite does not run in a north and south direction, and that a third substance would naturally form (as Mr. Ennor very properly stated) between a blue clay and granite rock. I hope from this hint that the subject may be resumed.—JOHN BLAKE: Summerland-place, Plymouth, July 12.

ROYAL SANTIAGO MINING COMPANY:

copper. He had seen nothing of the kind in the Metcalf samples. He was

happy to inform the proprietors that by the last mail very satisfactory accounts were received. They were now sending out 16 Cornish miners, a blacksmith, and a carpenter, and the directors intended sending out a purser and one of the best miners in Cornwall. The mine was likely to be worked without the aid of machinery, at any rate, for some years to come; in the Portland district it was entirely worked without such assistance.

A resolution was unanimously agreed to, authorising an amendment in the 18th clause of the Deed of Settlement, in relation to the shareholders' right to have a ballot whenever they may please. The 18th clause was also amended. The object of such amendment was to give a general meeting power to dispose of shares as they shall think proper.

The Chairman observed, that without such alteration they could not dispose of the shares in the way it was now proposed.

A resolution was also passed increasing the capital by the issue of 25,000 new shares, a deposit to be paid of 5s. per share. Of these 25,000 shares, 12,000 will be reserved for the completion of the new contract. 3,000 are to be allotted to, and paid up by, the vendors, 2000 are to be allotted to the Jamaica Copper Company, and the remaining 8000 are for distribution, *pro rata*, among the existing shareholders.

After some further preliminary arrangements, the meeting adjourned to Friday next.

GRAND DUCHY OF BADEN CHARTERED SILVER AND LEAD MINING COMPANY.

The first ordinary annual meeting of shareholders of this company was held, pursuant to advertisement under the charter, at Karlsruhe, on the 30th June.

JAMES WALKINSHAW, Esq., in the chair.

The Chairman opened the proceedings by stating that the charter of the company required not less than 12 shareholders, representing in all one-tenth of the capital raised to be present, and that, according to the dividend register, the required number were present; and he, therefore, declared the meeting to be legally constituted. He (the chairman) proceeded to remark that the meeting had been convened at Karlsruhe, in consequence of a wish expressed by the German authorities, as well as to show the Government of Baden, who had chartered the company, and H.R.H. the Prince Regent, who had condescended personally to patronise the undertaking, the character of their proceedings, and also with the view that the English shareholders might, by personal inspection, have the opportunity of becoming acquainted with their valuable property.

The report of the directors, with the balance-sheet, as also the reports of Prof. Ansted and of the managing director (Louis Lindner, Esq.) were then read, as inserted in our advertising columns.

It was moved by the Chairman, and seconded by F. FRASER, Esq., and carried unanimously, that the directors' report, together with the audited accounts, be approved and adopted, and that it be printed with the other reports.

A vacancy having occurred in the direction by death, it was moved by J. WALKINSHAW, Esq., seconded by J. W. RATHBONE, Esq., and carried, that R. Russell Norton, Esq., of Moorgate-street, London, be elected a member of the London committee of management.

The Chairman remarked that the auditors for the second year would be appointed by the shareholders; and moved that they be John Rankin Davidson, Esq., and Dionysius Wilfred Downing, Esq., both of London, which was seconded by J. COOPER, Esq., and passed.

The thanks of the meeting to the German directors of the company was proposed by T. C. BARNFIELD, Esq., seconded by JAMES COOPER, Esq., and carried.

Mr. FRASER, of the Department of Woods and Forests, acknowledged the compliment on behalf of himself and his co-directors.

The Chairman moved, "That the thanks of the committee of management, and of the proprietors generally, are due, and are hereby gratefully paid, to Louis Lindner, Esq., for his zeal and skill in the management and development of the company's property," which was seconded by JAMES COOPER, Esq., and carried.

The thanks of the meeting were moved by R. K. NOTMAN, Esq., to J. Gore Townsend, Esq., and Frederick Fraser, Esq., for their care and attention in auditing the accounts, which was seconded by T. C. BARNFIELD, Esq., and carried.

The Chairman proposed, and Mr. ASHON, one of the German directors, seconded the motion, "That the thanks of the committee of management, and of the proprietors generally, are due, and are hereby gratefully paid, to Louis Lindner, Esq., for his zeal and skill in the management and development of the company's property," which was seconded by JAMES COOPER, Esq., and carried.

The learned Professor, in returning thanks, gave expression to opinions highly favourable of the present state of the works and of the prospects of the company; and his remarks, which were very comprehensive, were listened to with the greatest satisfaction by the shareholders present.

The thanks of the meeting to Edward Taplin, Esq., their able secretary, were moved by the Chairman, and seconded by J. COOPER, Esq., and carried unanimously.

A German shareholder, on behalf of himself, and the other German shareholders, rose to move that the thanks of the meeting be given to the chairman and members of the London committee of management, begging to express the conviction entertained by himself and friends that the English system of working the mines now introduced was the only method of profitably treating the property, which they were convinced would before another year expired produce results highly gratifying to all parties.

This proposition having been seconded and carried, the thanks of the meeting were then voted to J. Walkinshaw, Esq., for his conduct in the chair, and the proceedings ordered to be printed.

It was notified that the next ordinary annual meeting would be held in London.

DINAS GREAT COPPER MINING COMPANY.

A meeting of adventurers was held at the offices, King William-street, City, on Thursday.

WILLIAM GARNER, Esq., in the chair.

The Chairman read the notice convening the meeting, and the minutes of the last general meeting, which were confirmed.

Mr. LELAND read the report of Prof. White, which appeared in the *Mining Journal* of the 25th of June, and the report of the committee, which stated that the operations had been carried on without interruption, and everything tended to confirm their original opinion and anticipations as to the productiveness of the mine.

The reports of Capt. Fox, which have already appeared in the *Mining Journal*, were quoted, and the document concluded by recommending the immediate purchase and erection of a water-wheel, for the purpose of crushing, as such a power is now absolutely necessary.

In answer to Mr. DAY, it was stated that, if the order was given for the crusher immediately it would be three or four months before it would be in working condition, which time they would have plenty of time for crushing. Capt. Edly, one of the best authorities in Wales, had visited that part of the mine containing lead, and considered it as promising as any in the district.

The report was unanimously adopted.

A long discussion ensued as to the erection of machinery on a large scale, which was eventually left to the committee.

A call of 2s. 6d. per share was made, and the proceedings terminated with a vote of thanks to the committee.

THE NANTLLE VALE SLATE COMPANY.

The bi-monthly meeting of shareholders was held at the offices, Moorgate-street on Wednesday.

C. WINE, Esq., in the chair.

The Secretary read the notice convening the meeting, and also the following report from the superintendent at the quarries.

Agreeably to instructions received, I beg to submit for the inspection of the shareholders the following, I hope, satisfactory report. The length of the tunnel already cut is 70 yards, and from the excellent quality of the rock discovered by the miners, who have during the past and present month cut through in width 16½ yards of solid and pure blue slate, I would suggest to the committee the propriety of at once sinking a shaft upon, and working the same, as it would be very convenient for the erection of a water-wheel, for the purpose of crushing, and also for the purpose of enabling us to work both sides of the vein at once; unless we sink this shaft now, it will be some years before we can work this, as there is much unworked rock between it and the west quarry. The probable time for the completion of the tunnel is very uncertain; it may be finished at the end of August, but it entirely depends upon the nature of the rock they meet with. The extent to which the east quarry has been enlarged is 16½ yards at the east end, and 10 yards at the west end. The slate rock, which has been exposed on the north side, appears to be of excellent quality, and which has been worked off during the past week is exceedingly pure and solid. The probable return of slate from this quarry is very uncertain; but we expect it to be very good monthly, and the same from the west quarry. The extent of ground opened at the Victoria Quarry is 20 yards by 14, which will be completed in the course of another three weeks, when we shall be able to commence working the rock, which at present promises well. With regard to the transit of slate to Carnarvon, it would, perhaps, be advisable for the company to continue the present conveyance, as there appears no difference between the charges by road and railway.

The Chairman observed, that the shareholders would no doubt concur with him, that the report of the progress of the works just read was extremely satisfactory. They would remember that, at the commencement of the works in November last, they were overwhelmed with difficulties, in consequence of the incessant falls of rain which for several weeks continued to impede their progress. He was happy, however, to state, that by a strict supervision over the management, and the exercise of economy in the application of the funds of the company, they had been enabled to pay a dividend of 12½ per cent.; and he trusted, from the encouraging prospects before them, there was every reasonable expectation that the dividends would go on increasing. It would be seen from the report, that the workings were classified under three distinct heads:—the east, west, and Victoria quarries. In the western quarry, which has been extensively opened, and for many years profitably worked, they found a great accumulation of water, covering the most valuable portion of the rock, and, with a view to its removal, they had commenced making a tunnel, and he was happy to find that they had already completed 70 yards of the same through the rock, and about 130 yards through the field, which would involve an expenditure of not more than 2000. The cutting of this tunnel had discovered the extension of the vein on the north side to a distance of nearly 50 yards beyond the present workings, and the extent of the rock, it had been observed, would take many years to work. These considerations, no doubt, from the extent to which this quarry was already developed, and the additional extent of rock which had recently been found to exist, that the future returns would be ample, and fully justify the very favourable opinions which have been formed of the same. The eastern quarry, it would be noticed from the report, had recently been enlarged to an extent of upwards of 400 square yards, which, with the large portion of unworked rock hitherto available, would render the returns from that part of the workings very considerable. At the Victoria quarry they had just uncovered a space of nearly 300 square yards; and at a distance of 7½ yards from the surface had discovered rock of a most promising character, which would be available for working at the commencement of next month. The site is peculiarly eligible for the development of a good quarry, there being ample fall for the rubbish, and also extensive space for depositing the same; and, in addition to these advantages, the possibility of falls would be avoided, from the remarkable flatness of the surface at this opening. The grant of an extension of land under their lease, had enabled them to open this quarry, and also to enlarge the eastern; and he felt the greatest confidence, that the returns from both these quarries would be exceedingly productive, and fully realise every expectation. On the whole, the present prospects were of a most encouraging character. With reference to the management, he might observe they had not been desirous of defeating economy, but had at all times exercised the strictest watchfulness over every branch of the expenditure. He had been for many years acquainted and deeply interested in mining property, and at one period of his life was a resident in the principality, and the experience which he had thus acquired, enabled him to speak with the greatest confidence as to the success of the future prospects of the Nantlle Vale Company.

Mr. JONES MILES stated, that he was fully satisfied, as a shareholder, not only with

the progress of the works, but with the management of the committee, who had undoubtedly exercised every economy in the disposition of the funds of the company.

Mr. BOWLAND proposed a vote of thanks to the committee of management, for their able and efficient services, which was seconded by Mr. MATTHEWS, of Gravesend.

The Chairman, in acknowledging the compliment on behalf of himself and his brother directors, observed that the interests of themselves and those of the shareholders were mutual; they had both embarked in one adventure, and he could but congratulate them in having the two-fold advantage, of excellency of metal and judiciousness of management, and he hoped the reward would be in increasing dividends.

After the conclusion of the above meeting, a special meeting of the shareholders was held to take into consideration the final allotment of the remaining shares. There were present Messrs. Badenoch, Miller, Rowland, Savage, Maclean, Butterfield, Wing, Watson, Bacon, Matthews, and Wilkinson.

CHARLES WINE, Esq., in the chair.

The notice convening the meeting was read, when Mr. MACLEAN stated that it was not desirable to retain unemployed in the hands of the bankers a larger amount of capital than was necessary for the safe and effectual working of the quarries, and therefore, in order to close the share list, and determine the constituency, he should propose that the remaining shares be allotted *pro rata* to the existing shareholders, subject to future calls, at the determination of the committee. The committee had for some time considered it prudent to decline the numerous applications which they had for shares in the company, inasmuch as they were not desirous of augmenting their capital beyond what could be profitably employed, and was necessary for the safe and efficient working of the quarries. He was happy to state that they had at the present time a very good balance in the hands of their bankers, amply sufficient for carrying on the works in a profitable manner, but as the profits were proportionally increased by the capital employed, it might be considered advisable to open the works more extensively, and he thought the adoption of the present resolution would be more satisfactory for the obtaining of capital for that purpose. Mr. MACLEAN then moved a series of resolutions, which were ably seconded by Mr. ROWLAND, and passed unanimously.

It was then moved and seconded, that a copy of the amended rules and regulations be sent to each shareholder.

The Chairman observed that the shareholders were indebted to Mr. Maclean for the care and attention which he had given to the subject embodied in the resolutions, which had unanimously met with their approval, and which he felt assured would be beneficial to the interests of the company. He could not allow the present opportunity to pass without noticing also the very able and zealous exertions of their worthy and indefatigable secretary, who had lately collected a considerable amount of information with the view of settling the question, and embodied the same in a small pamphlet, with the rules of the company, &c. He was convinced that the adoption of this information was attended with considerable trouble, and he had no doubt in the prosecution of his labours, and the fulfilment of his otherwise onerous duties, that the midnight lamp had often been his companion. He trusted the meeting would take into consideration the valuable services rendered by Mr. Bacon, and give him an adequate remuneration for the same.

Mr. WILKINSON bore testimony to the able services of Mr. Bacon, and suggested that the committee should take the subject of his remuneration into consideration at their next meeting, which was unanimously agreed to.

Mr. WILKINSON proposed a vote of thanks to the Chairman, which was seconded by Mr. WATSON, and carried unanimously. The meeting then separated.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—Field's engine-shaft is sunk 15 ft. under the 110 fm. level. The level here is worth quite 1000 per fm. for the whole length of the shaft. The level in the 110 fm. level, east of this shaft, is worth for copper ore 1400 per fm. We cannot yet sink No. 2 winze deeper on account of water; we have set a pitch from the western end of this winze 100 men, at 1s. 2d. in 11. The back of the 110 fm. level is set to 6 men at 1s. in 11. All our other tribute looks exceedingly well. No change in any other part of these mines since the last report.

ARUNDELL COPPER MINES (NEAR ASHBURTON, DEVON).—From the captain, dated July 9. The ground in Victoria engine-shaft is much harder than it has been, consequently we shall not have to put in more than two pieces of timber, and that will only be wall-plates, north side of shaft. The shaft is all timbered down, with the exception of the two pieces named. The water is much quicker; we are preparing the whim for the purpose of drawing the water and stuff. The air is bad in the shaft; the men have been hardly able to work the past few days. We are making a blow-George, for the purpose of blowing down air, and raising the powder smoke out of the shaft. The air-pipes are already made, and we have only the fly-wheel to make, and then it will be complete. The ground in the shaft is just the same as what I last reported, and is progressing as fast as possible. We are also driving towards the adit from Watson's shaft, but as we are not in far beyond the side of the shaft, I cannot report particularly on the character of the ground, but hope to be able soon to do so.

July 12.—We have just cut a branch in Victoria shaft, which is about 6 in. wide, underlaying north towards the Arundell shaft; this branch is composed of mud, very rank, and impregnated with black and spots of yellow copper.

BALLESWIDEN UNITED.—We are now sinking a winze from the 33 down to the 45 fm. level, 12 fm. east of the new flat level shaft; this winze is going down in good tin ground, and six men have broken during the last three weeks 2607 worth of tin in the 45 fm. level, and 45 men in the 45 fm. level, and are also driving towards the adit from Watson's shaft, but as we are not in far beyond the side of the shaft, I cannot report particularly on the character of the ground, but hope to be able soon to do so.

BALLYHICKEY MINES (COUNTY OF CLARE, IRELAND).—I have just returned from an inspection of the works, which yielded me largely 15 or 15 years ago, and the walls standing perfectly firm, requiring span-beams 60 feet long as bearers to carry the apparatus for the pumping and driving machinery. It is remarkable that this immense excavation, when last I saw it (15 years ago) was filled with solid lead ore from wall to wall, and so securely. This body of lead has been excavated for a depth of 100 feet and 200 feet long, being upon the meeting of two lodes, one running to the east and the other to the south of east. I am glad to find in the eastern end symptoms of these lodes again becoming productive, as the south-east branch was full of spar, charged with blende and galena, and I should recommend following this line of the vein. The water was not out of the bottom of the shaft, which was 5 fm. deep; a cistern was preparing to take off the water, and to fix the bottom lift. The bottom of the shaft is said to contain a lode of good ore for 2 feet wide, and I am of opinion that this is the cropping up of another body of lead similar to the first, as there is spar mixed with it, which entered largely into the first or great body of lead discovered at the surface. I believe these bodies of lead are formed in chambers, and that the hard unproductive floors of rock are ceilings between them, created to be left to support the immense weight of the bodies of lead ore have been extracted. I have no doubt your mine will soon be as good as ever it was. —MATTHEW FENCOTE.

BEDFORD UNITED.—The new engine-shaft is sunk 6 m. 2 ft. 9 in. below the 115: there is a promising lode in the bottom of this shaft, producing good work, and improving for ore; in the 115 end east the lode is about 2½ ft. wide, producing saving work, and altogether presents indications of a favourable change in the course of the month; in driving west in this level the ground remains hard, and in other respects there is no alteration to notice. In the 103 east the lode in the end is 2½ ft. wide, worth 2 tons of ore per fm., and likely to improve. In the 90 end east the lode is 2 ft. wide, composed of spar, blende, and some ore, but is not rich. Gross's winze is being sunk by the side of the lode, and we have not taken it down from the commencement. The 60 fm. level, when we sink it, and it has been taken down for some 30 fathoms. The pitch throughout the mine are looking well; we have 55 men employed in them, at an average tribute of 8s. 4d. in 11.

BODMIN.—The shaftmen have fixed a standing lift at the 70, the shaft is cleared up 2 fms. below that level; the lode on the 70 east is harder than it has been, but is still producing good work; the 70 west is not yet cleared to the present end, we believe we have not many fathoms more to clear: the tribute pitches are yielding good work. The crusher is set to work, and we shall in two or three weeks have 60 tons of ore ready to sample. We intend sampling another parcel of ore in a month from that time; our samplings will be more regular in future than they have been hitherto. The house for the steam winding engine, which I last week: the engine is ready in the morning, we expect the boiler will be delivered here this week; the other portions of the engine will follow as soon as the house is ready to receive them.

BOLENOWE.—The engine-shaft is progressing satisfactorily. The levels are without alteration.

BORINGDON CONSOLS.—In the 24 fm. level, west of Annie's shaft, we have four men driving on the course of the lode, which is about 2½ ft. wide, composed of spar, blende, and some good stones of lead. We have two men driving south on a branch opposite the shaft in the 24 fm. level; this branch is about 9 in. wide, running direct north and south, with a slight underlay west, composed of blende and spar, with a little blende and lead. In the 12 fm. level east we have a good lode in the lode; the lode in the end is about 3 feet wide, carrying a little lead, with indications of an improvement. In the 30 fm. level, west of Murchison's shaft, the lode is from 3 to 4 feet wide, ground improving, with small strings of lead, but hardly enough to save; going east, we have no alterations to notice.

BUTTERDON.—We have opened in all about 11 fathoms on the course of the new lode, and it still presents the same very flattering appearance.

CALLINGTON.—South Mine.—The lode in the 125 fm. level north is 2 in. wide, composed of white iron and lead ore; this end is laying open considerable tribute ground, and is now within eight fms. of count-house shaft. The lode in the incline shaft is 3 in. wide, composed of spar, blende, and lead ore; we expect, by sinking this shaft from 3 to 5 fms. deeper, to intersect the great southern elvan course, in which the lead lode was very productive in the level below. We have four men rising in the back of the 40 against the incline shaft, and calculate we have 9 fms. more to rise to communicate with this shaft; then the incline department will be well ventilated and unwatered, which will greatly facilitate our future operations. The lode in the 10, south from said shaft, is 5 in. wide, composed of spar, blende, and lead ore; we expect an improvement in this level shortly, as there is a good branch of lead discovered in the shaft, a few fms. south of the present end. —KELLY BRAY. The lode in the 80 east, as far as seen, looks well; we have opened it 1 ft. wide, which yields good saving work—full size not as yet ascertained. The lode west in this level is 2½ ft. wide, composed of spar, blende, and copper ore of good quality. We expect to intersect a small cross-course in about 6 ft. more driving, west of which in the 70 we had a very productive lode. The 70 cross-cut north still abounds with mineral branches, or dippers, dipping north; these branches are composed of spar, blende, and copper ore of good quality. The lode in the 70 east is 15 inches wide, carrying work. The lode in the 60 east is still in a disordered state, owing to the cross-course, which it has intersected. The tribute pitches, both on lead and copper, are much as usual.

CALSTOCK UNITED.—We consider we are just in the 'capels of the tin lode in the 45 east; the end is more wet, and not so speedy for driving. Caroline's shaft is suspended for the present, as you have instructed us. The ground in Varnish's engine-shaft is as last reported; the blende pitches are still very productive. We will put up a pair of bellows to make trial of the blende as you desire, and hope to report the result in a day or two.

CARADON WOOD.—Since last week we have intersected the lode in the 43 fm. level, and driven it about 7 ft., but are not yet through it, the part we have driven through is chiefly soft spar and blende. The lode in both ends, in the 35 fm. level,

is without alteration. A large quantity of water continues to issue from the north end; the men have driven in this end since last week 10 ft., and 2 fms. south; we have seen no change in the progress in driving these lodes than we otherwise should, but it is not been for the fullness of the air; if we drive these ends much further some step must be taken to convey air to them.

CARBERY WEST.—The engine-shaft is well timbered and divided for the ladder-way, &c., and the south cross-cut, to cut the Chief Constant lode at depth, is progressing satisfactorily. The winze under the Chief Constant level shows a carbonate of copper and grey ore, with branch veins of ore dipping into the lode, all indicating good produce at depth. A shaft, to cut the Daff's lode at 8 or 10 fms., is being commenced. The Golden works are advancing rapidly, and show at present indications of a most promising nature.

CASTLE DINAS.—Our engine-shaft is sunk about 7 fms. at the work Hatch, and we can do no more until we have our castings and flat-roads—expecting them on Friday (June 16). We have discovered a lode in Velocomy Bountee, within it, looking kindly, running east and west, which will intersect our other lodes, and we have an advantage on driving into the hill.

CHURCHSTOCK.—The engine-shaft is down 23 yards, still in the ground; the water increases, a large feed of which we have just cut, supposed to have a communication with the great cavern in the hill. The engine is ready to come on to the mine. We propose sinking about 20 yards deeper, and then drive south towards the mine. We have now less water in it, notwithstanding the late heavy rains. We could have about 20 yards to drive to reach the cavern, where, by analogy with other caverns in the district, a body of ore will be found, as the lode in the mouth of the cavern is very fine, and contains cubes of ore throughout. Samples of the lode have been taken from 10 to 15 ft. of air to the top. The engine-shaft is thoroughly timbered, and is 7 ft. 6 in. by 6 ft., and is sinking at 14 ft. per fm.

CLIJAH AND WENTWORTH UNITED.—Mary Ann Lode: The 16 fm. level is driven east on Mary Ann lode about 48 fms.; the lode is about 1 ft. wide, worth 100 per fm.—driving by two men at 2½ s. per fm. The stopes in the back of the 16 fm. level are also looking very well; the lode is about 15 in. wide, worth 120 per fm.—stopping by two men at 1½ s. per fm.; the stopes east and west of the winze in the bottom of the 16 fm. level are also looking very well; the lode is 15 in. wide, worth 100 per fm.—stopping by two men at 1½ s. per fm. The cross-cut driving south of Mary Ann lode, to intersect Julia lode in the 40 fm. level, is driven about 3 fms.—driving by six men at 4½ s. per fm.—Julia Lode: The 30 fm. level, east and west from the cross-cut, is about 1 ft. wide, the lode is about 15 in. wide, in each end, worth about 60 per fm.; but we anticipate when we get a few fathoms from the cross-course, the lode in this level will greatly improve. The winze sinking below the 20 fm. level is down about 4 fms. The lode at this time is somewhat disordered; but as soon as this winze is completed to the 30 fm. level, we shall be able to stop some good ore ground. The 20 fm. level west is driven about 4 fms., the lode is about 15 in. wide, worth 60 per fm.—driving by four men at 4½ s. per fathom; the 20 fm. level east is driven about 13 fms.; the lode is about 1 ft. wide, worth 30 per fm.; the stopes in the back of the 20 fm. level, east of the cross-course, are worth about 40 per fm.—stopping by two men at 1½ s. per fm.

CLONKILTY MINES.—In our mines at Duncannon Point the winze, driving on lode about 5 fms. under long level, has produced about 4½ tons of ore, about 5 tons of ore; the forebrest is much better than when we saw it on last visit; the lead seems to increase in quantity as we drive into the hill, and the blue killas is getting kinder, and more congenial to good deposits of ore. Our great adit level is driven 25 fms. west from its mouth, about 2 fms. over high-water mark; 3 fms. by 2 fms. have been stopped near the west end, under which we have another vein 3½ fms. deep, from the lode in which we have taken, including our open working at the mouth of the level, about 10 or 12 tons of ore. You may calculate the quantity yourself by the sub-joint measurement.—Our pile is formed into a long square-like heap of the following dimensions—30 ft. round at bottom, 27 ft. in the middle, and 24 ft. 7 in. at top, the height being 3 ft. Of the ore in this pile one-half at least is pure silver-lead ore, such as you told me contained from 25 to 30 ozs. of silver per ton of ore; and if we allow one-third waste, I think we ought to have from 15 to 18 tons of good lead ore, besides opening ground on the lode, which shows ore for 25 fms., and with rich stopping ground over and under the level to a great extent. I took down last week one rock of ore about 2 tons weight, which is to be seen in the level, and may have some more extent on operations by completing the cross-cut, and driving on the level in the above heap. We want you over immediately, to direct us in our further extensions.—MURDOCH COPPER MINES: The engine-shaft is sunk 4 fms. (6 by 4 inside timbers), a strong lode, 12 ft. wide, containing blende and copper in quartz. All our works are well timbered and secured, and our prospects are most cheering.

CLOWANCE WOOD.—Slater's lode is 2½ ft. wide, fine stones of ore in the past week. In the north cross-cut, ground much as usual, no appearance of a lode. At Cardozo's shaft, below the surface 12 fms., lode 2 ft. wide, pruned, peach, and gossan.

COMMARTIN CONSOLS.—We have driven about 30 fms. on the course of the lode, and find it quite regular; it is about 3½ ft. wide, composed of blende, spar, pruned, white iron, and blende, mixed throughout with silver-lead. A more kindly lode cannot be seen at the depth; and, judging from present appearances, in 30 fms. sinking we may expect good returns. I would also impress on you the necessity of getting the water-wheel, &c., completed before the setting in of cold weather.

COOSHEEN.—Extract from Captain J. Thomas's letter, dated June 28:—"I have pleasure in reporting a further improvement on Campbell's lode since visited by the directors, especially the end driving east, where we have cut a good bunch of ore. There is no change of importance in any of the other underground operations since my last report. The box of specimens will be forwarded by next Thursday's steamer to London, and which, I hope, will give satisfaction. We have now a large block of copper from Campbell's lode, about 2 cwt., which I will send, if the directors wish." [Some very fine samples in block have just been received at the office of the Coosheen Mining Company.]

CRAFNANT CONSOLS.—The west lode shows from 2 to 3 ft. in width—rich copper ore in quartz, with feeders or droppers coming in to enrich the lode as we sink. In the middle works a cross-cut is in progress in the level to cut the lode, which is expected to come on copper immediately. As the lodes are satisfactorily proved to bear ore for the 200 fathoms on their range east and west, we will immediately commence extension operations by completing the cross-cut, and driving on the level, on the inclines, tramways, &c., raising ore from present open works for market, and hope in a few months to be able to ship ore to profit to pay dividends.

CRETOWN.—The lode in the engine-shaft is at present small, with spots of copper and lead. In the 12 fathom level, west of the shaft, the lode is 6 in. wide; in the same level east the lode is split, and seems to come round more to the north, and is expected to improve shortly. The stopes in the back of No. 3 level are yielding some good lead and a little copper. In No. 4 level the lode is 4 ft. wide, with two good walls. All other things going on as usual.

CUBERT UNITED.—The engine-shaft has been sunk during the past week about 2 ft.; the lode is still promising, with casual branches of lead, and the ground favourable. There is a good lode in the 45 fm. level west, worth at present 250 per fathom; the ground is also much improved for driving, it being now set at 2½ s. per fathom, and, to the east, the lode is poor at present, and the ground favourable, but hope, however, that the lode will be found to improve on getting through the present uncongenial bar of ground, and which we expect to do in a few fathoms more driving. The lode in the 35 fm. level west is much improved; it is now yielding some excellent work, and worth about 100 per fathom; the lode in the winze sinking from the 25 to this level is also producing lead, and very kindly; in this level, to the east, the lode is much the same in appearance as stated in our last. The lode in the 25 fm. level west is still promising, and producing some lead, blende, and copper; the lode in the winze sinking under this level, to the east, is small and unproductive at present. The lode in the 15 fm. level west is much the same in appearance as it has been for many weeks past. We are now making some progress in clearing the engine-shaft at Trebellan, and, without unforeseen accidents, we shall have the mine drained to the 46 fm. level by this day week. We have completed the erection of the second whim, on the western part of the mine, where we hope to find some valuable lead ground. We have about 30 tons of lead on the mine, dressed and undressed, and unless our prospects are suddenly blighted by some unforeseen occurrence, we shall be ready to sample the lode at the end of the month.

CUMDYLL ROCK AND GREEN LAKE.—In No. 1 level we are clearing out the copper lode, which has been broken between the No. 2 level. In Pascoe's level, No. 1 stopes, we are carrying about 6 ft. of the lode, which will produce about 3 tons of ore per fm.; in No. 2 stopes we are rising, and have a lode in the back 2½ ft. wide, good copper throughout. In Price's level, No. 1 stopes is producing about the same quantity of ore as last week. The stopes in the level is still producing good copper. In No. 5 level the stopes will produce about 2½ tons of ore per fathom. In No. 6 level, No. 1 stopes, the lode will produce about 3 tons of ore per fathom. In No. 2 stopes the lode is 3 ft. wide, producing 2 tons of ore per fm. In No. 7 level we are breaking a large quantity of good quality ore; we are carrying about 6 ft. of the lode, which will produce 3½ tons of ore per fm. We are getting off ore to Carnarvon with all possible speed. We have commenced operations on the lode at the margin of the lake, and find it contains a large quantity of good ore, specimens of which Mr. Braithwaite has taken with him.

DEVON CONSOLS WEST.—The ground in the south cross-cut is much the same as last reported. The men, last week, intersected a small vein about 9 in. wide, with a south underlay, containing spar, blende, and jacks, the ground being mineralised throughout. I have not the least doubt, when the lode is cut, of having a good course of ore.

DEVON TIN MINES (DARTMOOR).—From the captain, dated July 14:—"We put the south mine engine to work yesterday; it works remarkably well—the men have pushed the work on as fast as possible. We shall now commence erecting a whim, which will be a great improvement to the lode, with all possible dispatch. We have taken out foundation for new smithy, shop, and mine."

DUNSELY WHEEL PHENIX.—We are stopping on the lode lately discovered by the cross-cut, and are breaking some of the best work for tin that I have yet seen in this mine. We are commencing to sink the proposed engine-shaft below adit on the South Phoenix lode, the lode is large, the north part produces a moderate sample of tin; the south part is chiefly composed of gossan, with spots of grey and yellow copper ore. In the cross-cut north we are intersecting a pretty looking lode, we have cut into it 5 ft., but are not yet through it.

EAST BOSORN.—We have been stopping in the bottom of the level this week, and I am very glad to say that the men are breaking good tin stuff. To-day (July 13) we have broken some very excellent stones of tin from the bottom of our western shaft, much superior to any we have hitherto raised. On the whole, our prospects throughout never looked better.

EAST CROWDALE.—The ground in the engine-shaft continues of just the same description as for some time past; we have seen no sign of the lode, north level, we expect it daily. There is no alteration to notice in the 38 west or north level. The ground in the rise and winze is somewhat softer, and consequently is more easy to break than for some time past, and but for the bad ventilation in the mine we might soon get these points communicated, but our men have not been able to work much of late from the foul air; something must be done in this matter, and I intend attaching a machine to the engine as soon as possible. The tribute pitches on the lode are without much alteration, but the pitch on the south lode is improving; the men have this week driven several tons of good ore from it, and the lode looks well; in the bottom the ore ground seems to dip east, or towards the shaft. Our crusher will be ready to work by the end of next week, after which we shall proceed with the drawing machine as fast as we can.

EAST FOLGOOTH.—The 20 end, east and west, are much the same as last reported. The 20 end west, on main lode, is improving; it is now much better than ever I saw it before for tin. In the 20 end north the lode is very promising; it is large, and some good work for tin, though not altogether rich. We have some more castings for the stamps, and we expect the remainder shortly. We have got home the lobby as far as the edge for water for the stamps, and are doing our best in order to get everything in readiness, so that the engineers shall not have to say they are waiting for us.

factory to show the copper contained in it, as the fact proves the existence of copper ore of a rich quality in the lode. I shall be glad to see you when you visit the mine, with a deputaion, as, from the progress they are making, and the nice parcels they are getting about, nothing is so likely to forward the interests of the mine as a few shareholders inspecting and judging for themselves. With such a mine as this, you need not fear any personal inspection. In any arrangement making, do not fail to provide for the trial of the north lead lode, of which we hear excellent reports from agents in the neighbourhood.

PENHAUGER.—We have laid the back of the lode open for about 10 fathoms in length, and here it shows a very extraordinary appearance, producing some rare and good stones of lead and fine gossan.

PEN-Y-GELL.—We are preparing to put down a drawing-lift in the engine-shaft, which will take the water from the bottom—it being hitherto drawn in barrels level above. The shaft is now sufficiently deep to commence driving the cross-cut, which we think will intersect the east and west lode in about 6 or 9 feet. The ground for the last 6 ft. sinking has been of a very conical character for lead; and we doubt not cutting the lode we shall find something good. The 10 ft. level, driving east of the engine-shaft, is 2 ft. wide, with good stones of lead; the 10 fathoms level, driving west of the engine-shaft, is without alteration; the lode in the adit driving west is 6 ft. wide, producing a little lead; the lode in the winze sinking the adit level, is 3 ft. wide, producing occasionally good stones of lead. The lode shaft is still in a very good channel of ground; and we often meet in sinking the north and south veins of clay, mixed with lead.

PERRAN UNITED.—Have very little to add to-day (July 9) in addition to last week's statements, further than to say that a branch has been intersected in the cross-cutting south from the engine-shaft, about 10 in. wide, consisting of quartz and copper ore, of the most beautiful description that can be seen. From the nature of the branch, and the quality of the ground about it, there is no question, in my opinion, but we are nearing a lode both of magnitude and value. The lode in the 30 ft. level still retains its good appearance, and quantities of excellent work are being brought to the surface daily. More of the eastern part of the mine would have been opened this time, had not the men been hindered about other work. The putting up of engine, and draining the mine to the bottom, is now our principal object.

In extending our cross-cut south from engine-shaft, we appear to be getting into one of ore lodes; we have extended into one 4 feet, but cannot yet tell its size, as we are not yet through it; but it carries good branches of ore already.

PERRAN WHEAL ALFRED.—The lode in the bottom of the shaft is between 2 and 4 ft. wide, of great promise, and producing good stones of copper ore—a few specimens of which I hope to send you in a few days.

PERRAN WHEAL JANE.—No alteration here; the stratum is still mixed with gossan containing copper ore and gossan.

PRINCE ALBERT CONSOLS.—There is no material alteration here since the last report. The lode is 3½ ft. wide, very hard, well defined, and producing saving work.

PRINCE OF WALES SILVER-LEAD MINES (NEAR DOLGELLY, MERIONETHSHIRE).—The several levels of these mines now open show good returning ground; the various levels show fine specimens of ore, even to surface. In the lower level we have a fine lode, and cut a rich lode 3 ft. wide, all spar and lead of the richest quality. The upper levels are very promising, and we have now on surface from 50 to 70 tons of silver-lead ore, which by assay from a specimen taken out of the heap, gave about 100 per cent. of lead, and 30 ozs. of silver per ton of ore. We have laid down our water wheel, and hope to have the wheel and all necessary machinery for crushing and dressing our ores, as well as for pumping and drawing, in full working order in two or three months. I may remark, that during the inspection of these mines St. Pierre, civil and mining engineer, reported the presence of gold, since which several pieces of bloom-spar, with gold traces, have appeared in the lodes.

RHOSWYDOL AND RACHEIDDON.—In the 20 ft. level south we have driven 10 fathoms 5 ft. 6 in. the lode ore continuing up to this point, when the cross-cut was driven, and cut it out; the lode being large and ore, we took down a large width for 10 ft. in length, which contained lead; we also crossed the lode in 6 ft. north, to try the lode in that direction, and stopped 5 ft. in the lode. After these trials, I think it is a very speculative affair to drive the 20 fathoms level further west at this depth; there is not a particle of ore in the end, though it is again in a few feet westward. In the back of the 20 ft. level, 5 ft. 4 in. the lode has been stopped, the entire produce of which averages 1 ton of ore per fathom; in the bottom of the 20 ft. level we have sunk the winze 1 ft. 3 in. below the level, in a course of ore averaging 1 ton to the ft.; the bottom is looking well; the side of the level we have driven down 1 ft. 2 in. a platform for the winze; this is a good level, the 30 ft. level has been driven westward; it is now come into the ground, which improves as we go west; the ore has not yet been taken down, we have tried it, and find a considerable improvement as we go on; we may, perhaps, not find the ore very rich till we come under the winze, which, if the ground comes as at present, will be about the end of this month. In a stop in the back level, between the two 20 ft. levels, we have stopped 4 fms. of ore, ground, one of the best we yet worked upon in this part of the mine; the average yield is 1 ton to the ft. in the lode. The winze shaft we have had several small jobs to get it down to the 20 ft. level, with what we have since done the winze is ready to draw. The 60 ft. level has been driven 4 fms. further; the ground is easier for driving. On the 23d June we weighed about 11 tons of lead per the *Friendship*, which ought to have reached the Dee before this. I had expected the *Mermaid* on Saturday to take 6 or 7 tons, but she did not arrive in time. The quantity of ground cut in the month was 27 fms. 1 ft. 8 in.; the ground was 15 fms. 0 ft. 10 in., which produced from 14 to 15 tons of ore. The quantity of ore ground is much less than usual. The men in the west did not work so much ore ground as usual, and another party were at the winze-shaft, additional hands could not be procured.

RITTON CASTLE.—The engine-shaft is down 24 yards; the pumps are fixed, and engine will be at work by Monday next. We shall sink 26 yards more, and drive west, to intersect two lodes, where we may at once expect to find ore, as it is in the sump in the level. We had proposed first draining the sump, but the men in the engine-shaft, near the junction of lodes, being favourable for sinking, thought it advisable to proceed with the shaft, as after a short delay it will accomplish the same object at a greater depth. A good quantity of ore was left in this level when the mine was abandoned on account of the water, and the inefficiency of the water-wheel to drain the works. In the South Boy or Rock Mine, recently opened, the east of this mine, a fine course of ore is reported to have been found, and the lode for 6000 ft. All the lodes crossing Ritton Castle having been worked to profit by the Boy Mine, and, independent of the facts already known of the value of the lode, it is fair to infer success also at a greater depth.

RYE HILL.—The lode in the 28 ft. level is still small and poor; we have not cut the lode in the cross-cut yet, but expect to do so daily. I have put two men to work on the branch which was intersected in the north cross-cut; it is about 10 ft. wide, producing good stones of tin; I intend to put two other men to drive on as soon as those east are sufficiently out of the way. There is nothing new to report respecting the pitches. We shall begin to burn our tin for next sampling on our morning.

SARINGTON.—The lode in the deep adit level, driving east, is 2 feet wide, composed of spar, junk, and occasional stones of lead ore; the lode in the back of the adit level, east of the 30 ft. level, is 1 ft. wide, producing good stones of tin; the lode in the cross-cut, driving south from the middle level, is 1 ft. wide, producing good stones of tin; the lode in the cross-cut, driving east, was left on the south by the former company, on which lode we intend driving east, as many tons of ore were raised from this lode in the upper levels by them; the lode in the back of the shallow level will yield about 3 cwt. of lead ore per fathom; in the winze sinking the shallow level the lode is 1 ft. wide, composed of spar and a little lead. We commenced building the engine-house, which we hope will be completed in six or six weeks from this time. The engine-shaft is progressing favourably—down about 6 fms.

SHED HILL.—The lode in the deep adit level, driving north, is 2 ft. wide, composed of spar, and with lead ore; the ground is at present hard, but in the back of this level the ground is very soft, being decomposed manganese, and excellent lumps of lead ore; it is so soft in the roof of the level that we can push an iron bar into it; consequently we anticipate having soft ground in the breast again in a few days; in the same level driving east the ground is somewhat harder for driving, strongly mineralised. The cross-cut towards the coppice lode is indicating that we are near the lode, and we are in daily expectation of cutting it; as soon as we find the lode, we will inform you of its character. We have nothing of importance to report at the foot of the Round Hill, being much as usual. The masons will commence on Monday (weather permitting) to build the engine-house, &c., when no time will be lost in completing the same, as it is of importance to get the engine to work as early as possible.

SOUTH CARN BREA.—We are sinking the engine-shaft by nine men, at 25 ft. per fathom, in the back of the shallow adit by four men, at 31 ft. per fathom. Driving the adit south to cut the north lodes, by two men, at 17 ft. 5 in. per fathom. Driving the adit southerly, by four men, at 31 ft. per fathom.

SOUTH CREWEN.—The lode in the 12 ft. level, east of Gore's still continues largely gossan, quartz, and spots of ore. In the 24 fathom level east the lode is 4 ft. wide, stones of ore; this end is driven through the elvans. The rise in the 24 ft. level are expected to hold daily; then we shall drive the 54 ft. level, to stop the back east and west of the rise. In the 64 ft. level the lode is 3½ ft. wide, throughout; here the ground is very hard and spar for driving. In the 64 ft. level, west of Varnish's, we have driven about 6 fms. the lode looks well, and will produce 1½ to 2 tons of ore per fathom; the ground is easy, and the lode promising to be a large quantity of copper ore. In the 74 ft. level the lode is 2 ft. wide, stones of lead, from present appearances, cannot fail of producing a bunch of ore; the lode is at present small and unproductive. In the 84 ft. level the lode is 2 ft. wide, quartz, munda, and stones of copper ore. In the winze from the 64 to the 74 ft. level is large, and sinking in tribute ground. We purpose driving the 54 ft. level now cut, where, from present appearances, we are likely to meet the lode in the 64 ft. and 74 ft. levels, west of Varnish's. At Carn's, the lode is sinking by sixteen men, ground much as last reported. In the rise against the shaft, by six men, ground hard, up from the 64 to 6½ fms. The south level and the south lode are much as last reported. Millett's shaft not sinking at present, for want of men.

SOUTH CORK (BALLTIDEHO).—Our 9 fathom level, driving east, has been driven the last month 5 fms. 4 ft. 8 in., from which we have raised from 6 to 8 tons of ore, at a cost of 22½ fms. 10d. We are rising on this lode to open into No. 2 winze, which is good ore ground all through. We are also sinking from the forebore into the lode, to open into the 14 ft. level, by which we shall have a gangway into the lode, which will thoroughly ventilate the mine, and while sinking raise ore. In the 14 ft. level we are rising on the back of a fine lode of reddish grey ore, which will open into Raycroft's lode in the 9 ft. level. We have driven 4 ft. 4 in. level west, at a cost of 12½ fms. 8d., which produced ore of the best quality; the lode is rich ore-bearing ground, with branches of solid ore running through the lode, and separates the hanging wall at top. On stopping south of this lode we found to grass about 7 tons of good ore per fathom. In length. Good bargains are set at 20 fms. level, which have been cleared out to the extent of the old lode, and we expect to add to these piles in the course of a week or two 20 tons of ore already raised and now dressing. Our engine-shaft, 10 ft. by 6 ft. within timber, is now down fast. Our floors are arranged, magazine built, office yard, and smithy, &c., and from the hopeful prospects in view, the miners are in high spirits in expectation of large returns of ore from the several bargains now entered on.

SOUTH DEVON GREAT CONSOLS (TAVISTOCK).—Our engine-shaft is now down about 7 fms. below the surface, the ground continues favourable for sinking; the lode in the adit level is 3 ft. wide, composed of capel, spar, pruan, munda, and spots of ore. Our carpenters are working overtime, and are using every means in their

power to get on the surface work as rapidly as possible. All our operations are progressing satisfactorily, and our prospects are very encouraging.

SOUTH OF SCOTLAND MINE.—The 25 fathom level is now driven north about 7 fms. from the shaft, the last 3 fms. of which is in a kindly compact rock, and the lode, which is about 2½ ft. wide, is letting down a deal of water. The men have 2 fms. more to drive to be opposite where the ore first makes in the east lode in the 12 ft. level; they will then cross-cut east to that lode, where I hope they will find a great improvement. Two men have also begun to drive south from the shaft in the 25 ft. level on the middle lode, to ascertain its value in that direction, as the ore lode they had in the shaft has dipped that way. The surface work has progressed very slow for some time, owing to the carpenter being laid up, but he is recovered again, having begun to work yesterday. He will now proceed to finish the washings floors, drawing machine, &c., which are very much behind.

SOUTH TOWEY.—We are still driving the adit cross-cut east, to prove what more there may be in that direction.

SOUTH WHEAL MARY ANN.—In continuing we laid open a lode east of the great elvan course, which I think is No. 4 lode. We opened near the south boundary, which, from present appearances, a very promising lode. As soon as the new windlass is completed, the men will commence sinking on it. We have also been sinking on No. 3 lode, according to the inspector's order; the ground is hard for sinking, and the lode is running north-west and south-east, underlaid by a fine lode about 2 feet in a fathom. The shaft is sunk 5 ft., making altogether 3 fms. from surface. The lode is 20 in. wide, composed of gossan, pruan, horn-stone, and beautiful flookan on the foot-wall 3 inches wide, altogether a beautiful-looking lode. We have not yet found the main part of No. 7 lode; we have opened on several small branches, but there is a great change in the ground; in the last two pits the men have thrown up a quantity of shode stones, and, in consequence, I think the lode is not far from us. We shall continue on with the easting after to-day (July 14) with two men, and the other four men engaged sinking on the lodes above mentioned. Our prospects here are looking well.

ST. AUSTELL CONSOLS.—In sinking Down's engine-shaft we have a most beautiful light coloured clay-slate hillside to the south end of it; since the engine went to work we have sunk about 9 ft. in this ground. At Grou's engine-shaft, we have forked the water, with the engine going about two strokes per minute, 12 ft. in about four days; we are now ready to cut down this piece of the shaft. Our pillars, &c., being fixed, we shall not find any difficulty in forking out this old mine, as our engine will work faster every week for some time while the engine-shaft is sinking at Down's. In the adit level, on Hawkins's land, the ground is unsettled, but it is a good lode, as we proceed, with this level into the hill I have no doubt the ground will improve. We are driving this end for 20 ft. per fathom. The present end is not far from the great lode; we have a stream of water running out of the bottom of the end. As soon as Grou's shaft is drained we shall be in a position to set several tribute pitches. Our engine is working very well.

TAMAR.—We have not taken down any lode in the 215 end for a month; the ground is changed very much for the better, and from the indications of water, which is oozing from the lode, we may expect it rich when taken down. In the 205 end the lode is split in two branches, one is about 9 inches wide, and the other 15 in., both of which are good stam work. There is no alteration in the 190 end. In the 175 end the lode is 16 in. wide, composed of floor-spar and ore, good work. In the 160 end the lode is 2 feet wide, composed of pruan, capel, munda, and ore, of a very promising nature. In the 145 end the lode is 6 in. wide, with occasional stones of ore, but not to value. In the 135 end the lode is 18 in. wide—saving work. North Mine: The 100 end is getting into better ground, and from its appearance we shall have a change shortly. In the 80 end we are desuing the lode. The ground is much the same as it was in last report.

TAVY CONSOLS.—The ground in the engine-shaft is easier for sinking, and the men are making good progress; part of the cross-course is now in the shaft, and most likely will reach down to the 80 ft. level. In the 68 fathom level the ground is very wet, lode 3 ft. wide, producing a little munda, and spots of ore. The 56 ft. level, on the south side, is 12 ft. wide, with ore, when being 12 to 14 ft. wide, I have put men to cross-cut through it, as the south part may possibly be more productive, as I find a change of that sort in the 46 ft. level. The 56 end, on the north lode, is poor, but the ground is easier for driving than it was, and I expect a favourable change. The 46 end, on the north lode, is worth 3 tons of ore per fathom; the same end, on the south lode, is at present poor; here I have put the men to cross-cut the lode, as in the lode 10 fathoms behind this end the lode is 12 ft. wide, and 4 ft. of the lode, by the south wall, is worth 3 tons of ore per fathom. Up to this time the water in this level has come by the north wall, but now it is coming away from the south part of the lode, and I have no doubt but that this part of the lode will not be productive. The 36 end is producing good stones of ore. The lode in the back of the 46 is producing 4 to 5 tons of ore per fathom. In the cross-cut north in the 12 ft. level the lode is composed of spar, peach, and spots of munda and ore. We must be getting near the lode. The new shaft, on north lode, is easy for sinking, and in the lode we occasionally find stones of munda, and spots of black and yellow ore.

TEES SIDE (LEAD, CUMBERLAND).—At Providence shaft, we are working and raising some excellent ore, much better than was reported, or we had reason to expect where we are obtaining it. Our operations here are retarded, in consequence of some iron work not arriving from Newcastle, which is requisite before we can either put down the pump or fix the permanent apparatus for lifting the work, or even explore the western part of the workings, said to be so much richer than anything yet met with. At Metal Band, we have obtained a plentiful supply of water for washing purposes, having brought the water pumped from the shaft to our dressing-house here. We have a small parcel ready for sale. The vein improves in appearance as we drive east, and is yielding ore that will about pay cost. We shall rise and make trial in the limestone shortly.

TEHDI.—We have forked the water to the 20 fathom level, and dropped another 10 ft. lift, and expect to see the 30 ft. level in about a week. Our whim and shaft tackle are nearly completed.

TINCROFT.—On Highburrow tin lode, in the 152, driving east of engine-shaft, the lode is 3½ ft. wide, worth 16½ per fathom; the lode in the back of this level are worth 14½ per fathom. The lode in the 142 level, east of Martin's east shaft, are worth 14½ per fathom. The lode in the back of the 132 level are worth 13½ per fathom. At North Tincroft, in the engine-shaft, sinking below the 130, the lode is 5 ft. wide, worth 45½ per fathom; in the east end, same level, the lode is 2 ft. wide, worth 15½ per fathom; in the rise in the back of this level the lode is 2½ ft. wide, worth 16½ per fathom; the lode in the back of this level are worth 45½ per fathom. In the west end, same level, the lode is 2 ft. wide, producing saving work for tin and copper. In the 120, west of said shaft, the lode is 3 ft. wide, worth 8½ per fathom. In the 110, driving west, the lode is 4 ft. wide, worth 35½ per fathom for copper. In the winze sinking below the lode is 4 ft. wide, with green stones of copper ore, or even, the 108 ft. level, west of said shaft, the lode is 3 ft. wide, worth 7½ per fathom. Grou's lode in the back of the 70 ft. level, west of downright shaft, is 8 feet wide, worth 30½ per fathom. In the 60 ft. level east the lode is 1½ ft. wide, worth 35½ per fathom for copper ore; in the west end, same level, the lode is 3½ ft. wide, worth 15½ per fathom; the lode both east and west are worth 20½ per fathom for copper. On Chaple's lode, the rise in the back of the 142, west of engine-shaft, is 5 ft. wide, saving work for tin. The lode in the back of the 110 level of downright shaft, are worth 15½ per fathom. In the 110 level, west of the lode, the lode is 4 ft. wide, worth 15½ per fathom. Dunkin's lode in the engine-shaft, sinking below the 110, is 4 ft. wide, saving work for tin and copper; in the west end, same level, the lode is 3½ ft. wide, worth 15½ per fathom for tin and copper; in the east end, same level, the lode is 4 ft. wide, saving work for tin and copper. In the winze sinking below the 90, west of said shaft, the lode is 4 ft. wide, worth 7½ per fathom for copper.

THOMAS'S UNITED.—The water is drained to the 50 ft. level, and by the 20th inst. I hope to see the bottom of the mine. The winze sinking under the 40 ft. level is worth 10½ per fathom. The 50 ft. level east is worth 15½ per fathom. The lode over the 50 ft. level is worth 17½ per fathom.

TREBEILL.—We have been stopping the tin lode (in the bottom) the whole size or width, to ascertain the most productive part of the same, with the intention of sinking on the same, and, I am satisfied, that the south part is the main portion of the lode; we have the same pump or fix the permanent apparatus for lifting the work, or even improvement. We are preparing a parcel of tin for market, and shall carry the same to smelting-house on the 22d inst.—say 80½ worth, I cannot tell the exact quantity but it will be the largest parcel we have ever returned; you will have the tin bill, remittance, &c., immediately after the sale. Everything on the mine is in good order, and every effort is being made to bring as much tin to market as possible, and also to bring the mine into a good state.

TREBURET CONSOLS.—We have cut the south lode in Landshill. Our level, came in contact with it after driving about 8 fms. from the open cutting, just the distance I calculated. This lode is about 1 ft. 6 in. wide; it is composed of spar, gossan, flookan, and munda. Just where we came into it the bearing of the lode is north of east by south of west; the underlay is about 4 ft. per fathom. North, we are driving on the course of this lode, and at present the ground is favourable. From where we took up our adit, the country rises about 2 ft. 6 in.; so that we shall soon have a great height of backs over us and a rich lode.

TREBURET UNITED.—The engine-shaft is much the same as last reported for sinking. Gossan's lode is producing more soft spar, capel, and munda, altogether about 5 ft. wide; there is a quantity of water coming from it. The cauter lode is about 3½ ft. wide, very regular, and much the same in appearance as when I wrote you last. We have six men in each end, and eight in the shaft: the air machine supplies air sufficient for both levels at the 15.

TRELAWNY.—Trelawny shaft is sunk 5 fms. 4 ft. below the 120 ft. level, and the ground is rather hard. In the 120 ft. level, north end, the lode is still poor; in the south end it is 8 ft. wide, and worth 8½ per fathom. In the 107 ft. level, north end, the lode is poor; in the south end it is 2½ ft. wide, and worth 8½ per fathom. In the 92 ft. level, south end, the lode is 2 ft. wide, and worth 12½ per fathom; in the winze in the bottom of this level the lode is 2½ ft. wide, and worth 11½ per fathom. At the north mine, Smith's shaft is sunk 7 fms. 5 ft. below the 88 ft. level, and the ground is at present wet and hard. In the 88 ft. level, north end, the lode is 2 ft. wide, and worth 10½ per fathom; in the south end we have just got through the slide, and the lode is disordered, as it usually is so near the slide. In the 78 fathom level, north end, the lode is 2 ft. wide, and worth 8½ per fathom. In the winze in the bottom of this level the lode is 3 ft. wide, and worth 8½ per fathom. In the 68 fathom level, north end, the lode is 2 ft. wide, and worth 12½ per fathom. Having completed the communication of the 55 and 68 fms. levels, we shall to-morrow (July 13), resume the driving of the 55 end north, where there is a good looking lode. The branch in the 40 end is looking very promising, and from its bearing it will undoubtedly lead to the main part of the lode. In the 30 cross-cut we have cut through the lode, which is 1½ ft. wide, very regular, but not much ore in it. Chippendale's shaft is sunk 19 fms. from surface, and the ground still good. Our stops and pitches are without change.

TREMOLLETT DOWN.—The adit end south driven by two men in mineralised kilias, and presents the same prospects as last reported. The lode in the west end is from 3 to 4 ft. wide, producing spots of copper and lead ores, which is a very kindly lode for making large deposits of lead in depth.

TREWOLLS AND TRENTNICK.—Since the last general meeting, a plat has been excavated 14 feet long and 9 feet wide, by 7 feet high, at the eastern end of the engine-shaft, and about 26 fms. from surface. The 11-inch lift alluded to formerly has been fixed in the eastern—ground cut, and bearers placed to carry said lift. A second lift has been put down of 8-in. pitwork, tackle arranged for sinking below the aforesaid plat, engine and whim-shafts divided and cased down, &c. The engine-shaft has been sunk 9 feet since our last meeting through a lode averaging from 2 to 3 feet wide, and composed of a considerable quantity of munda, with some rich work for tin, and may be considered a very promising lode; the ground is hard for sinking—let to the snappers at 25 ft. per fathom. We have four men employed clearing and securing the old men's workings, both east and west of the engine-shaft, in order to lay the mine more extensively open. I recommended at the last general meeting that arrangements should be made for stamping the produce of the workings, but I have not been able to obtain immediate possession of mills, for which I am in treaty, but hope to have them shortly. The tinstuff is augmenting.

VALE OF TOWY.—The 10 ft. level end driving north looks well for lead, and is producing 1½ tons per fathom. The lode in the back of the same, likewise the winze sinking under the deep adit level, are producing good work for lead. In other respects, as last reported. Our sampling will be about 55 tons of lead ore.

WEST ALFRED CONSOLS.—The north lode in the 75 ft. level, west of Bazley's winze, is 4 ft. wide, worth 6½ per fathom. The lode in the 65 ft. level, west of Old shaft, is 5 feet wide, worth 15½ per fathom. The lode in the slopes east of winze sunk below the 60 ft. level, west of old sump shaft, is 7 ft. wide, worth 30½ per fathom. The lode in the slopes, west of above winze, is 4 feet wide, worth 20½ per fathom. We have succeeded in hoisting Philip's shaft with a bore hole to the rise; we have about 3 feet to sink through, which we shall complete in a few days, when our principal object will be to cut our north and south lodes, where, from the congeal strata, we have every reason in expecting to find them productive. We have to-day (6th inst.) re-commenced driving the 55 ft. level, west of Philip's shaft; the lode in the present end is 2½ ft. wide, of a disordered character.

WEST ALLY-CRIB.—We have reached the adit level, and have commenced sinking under it; the ground is favourable.

WEST BASSET.—The 84 ft. level east has intersected the cross-course, lode disordered a little, but producing some ore, and looking kindly to improve. In the 75 end, 10 fms. 3 ft. have been driven this month through good ore ground. The 65 end is improved, and worth 2½ tons per fathom. The tribute pitches continue to look well.

WEST DING DONG.—The lode in the end in the 20 ft. level, west of the flat rod shaft, is 2½ ft. wide, worth for tin 40½ per fathom; the lode in the slopes over the back of the 20 west is 2½ ft. wide, worth for tin 35½; the lode in the 20, east of the flat-rod shaft, is 1 ft. wide, impregnated with tin, but not rich. The lode in the slopes in the 10, east of the flat-rod shaft, is 1 ft. wide, worth for tin 12½ per fathom; the lode in the slopes over the backs of the 10, east of the engine-shaft, is 10 in. wide, worth for tin 8½ per fathom. The lode in the end in the 27, east of Enistevan shaft, is 9 in. wide, worth for tin 10½ per fathom; the lode in the slopes over the backs of the 27 east, is 10 in. wide, worth for tin 8½ per fathom. In the whole we are getting on very favourably.

WESTON.—After nearly 12 years' driving in Cross's level it has at length reached the rider lode. About 56 yards have been driven east on the course of the lode, and a communication effected with No. 3 shaft at a distance of 12 yards from the point of intersection with Cross's level; the rider here is about 40 ft. wide. The forebore is in harder ground, and we are now cross-cutting north and south for a few fathoms, in order to ascertain both the width of the rider at this point, and to prove the nature of the ground on either side. There is a strong vein of carbonate of lime in the rider about 3½ ft. wide, containing occasional cubes of lead ore, but not to value. The driving at the forebore, which is in the direction of the White Grit Mine, looks most promising for making ore; in this direction, in about 15 fathoms, the Corridon silver lode intersects the rider. This portion of the mine has now arrived at that stage which requires careful examination as to the future operations. Cross's level is nearly half a mile in length, with a tramway down the whole distance. The rider lode is drained for a mile, and bears the same characteristics as in the White Grit Mine adjoining, and there is now every inducement to carry on a vigorous search, more especially as perfect ventilation is effected, and no obstacle in the way. Very little timber will be required, and the driving will cost less than 5½ per fathom. The late heavy rains have for the present stopped the trial on the Village lode.

WEST WHEAL.—The engineers are busy erecting the engine, having fixed the cylinder, and connecting the pipes, &c. We have a few men engaged bringing a pump, sinking down the same level, as the old mine, to the present engine, for feeding boilers and condensing, which will be found valuable, therefore we shall have nothing but surface work until the engine is ready to work, consequently my reports must be limited. I am glad to say, however, that Wheel Trustum is draining our ground already; I am persuaded that mine will drain ours to a great extent as the levels are extended. I am hurrying on Mr. West, and hope he will be as quick as possible in completing the engine.

WEST WHEAL BULLER.—We are still driving the adit end, but the lode at present is poor, being composed of spar, chloride, shale, and a little tin, and having a very kindly appearance. In the slopes in the back of the adit the lode continues of much the same quality, and will pay for breaking the ground.

WHEAL ARTHUR.—North Lode: The lode in the 50 west is 4 ft. wide, yielding stones of copper ore. The lode in Cock's slope, in the back of the 35 west, is 4 feet wide, producing 1½ ton of ore per fathom, worth 8½ per ton; the lode in the back of the 35 west, is 3 ft. wide, composed of spar, munda, and stones of ore. The lode in Nankive's rise, back of the 35 west, is 3 ft. wide, unproductive. The lode in Hartland's rise and slope, in the back of the 35 west, is 6 ft. wide, yielding 5 tons of ore per fathom, worth 8½ per ton. The lode in Coad's rise, in the back of the 20 west, is 4 ft. wide, composed of gossan, spar, munda, &c.—Old Lode: The lode in the 70 west is 4 feet wide, composed of spar, munda, and spots of ore; east, it is 3½ ft. wide, yielding stones of ore. The lode in James's winze, sinking below the 60 east, is 5 ft. wide, composed of spar, munda, capel, and spots of ore. The ground in the winze is very rich, and we expect to intersect the lode; we expect to intersect the lode very shortly, and then drive by the side of it to cut Watson's lode, after which a new engine-shaft will be sunk immediately.

WHEAL BAWDEN.—The engine-shaft is down about 15½ fms.; we have had hard ground and plenty of water to cope with, and last month our water was rather too little for the wheel, when we had to bring in a lead from the Old Treburget, which has assisted us a little. In two or three months we expect Wheel Eckley engine will go to work, when I can calculate on a full stream of water. We are now sinking at 14½ tons per fathom.

WHEAL CATHERINE.—The eastern lode, driving north in the 25 fathom level, is 2½ to 3 ft. in width, composed of munda, spar, and stones of lead. I broke a very good stone of lead there this morning. We have suspended the driving south in this level, on the western lode, for the present, and have put the men to drive east, to ascertain whether there are any more lodes further east. The shaft is about 5 ft. below the 25 ft. level, the ground at present rather hard.

WHEAL EDWARD.—The 30 cross-cut is driven 6 fms. south of shaft, price 5½ per fathom, driving by six men, the other three shaftmen are engaged about preparing the lift, fixing cistern, taking up the drawing-lift, &c. I hope we shall commence dropping to-morrow (July 14), and resume sinking the shaft again about the latter part of the ensuing week, when we shall place three men and three boys in the cross-cut, and the shaftmen return to their places in the shaft. The new smith's shop is nearly completed, and the roof will be put on about the end of this week, and shall at once commence the office and material-house—the agent's house is nearly completed. I think about a fortnight or three weeks the painting and plastering will be dry, when it shall at once be occupied.

WHEAL ECKLEY.—The engine-shaft is completed to the adit, and a plat cut. The sump is now open for bearing cisterns, and the course of the lode, which is about 6 ft. wide, and better indications for lead ore can never be seen; one of the most experienced and respectable agents in the county recently surveyed the mine, and he was so struck with the appearance of the concern that he at once became a large shareholder. Nearly the whole plant of materials, including the new 40-in. engine, are on the mine, the buildings are getting on fast; about 10 masons are daily employed, and in the course of a few weeks we expect to put the engine to work; shortly after which we shall commence to raise ore.

WHEAL FANNY.—We have again resumed sinking the old engine-shaft, No. 1, with a full pair of shaftmen. The shaft being so very wet and difficult to sink, and some of our men from Dartmoor, unaccustomed to working in a shaft of this description, cannot get them to stand the water. We must endeavour to sink as fast as possible, being the most essential operation in the mine to be attended to. Our end driving north in the 19 ft. level, on the course of the lode, we have driven about 3 fms.; ditto on its course south about 2 fms. The character of the lode is much the same as last reported. In the 17 ft. level, driving west on the copper lode, we have driven about 2 fms.; the lode is still ore, but not so rich as it was when we sent you the sample—still looking very promising, and no doubt in depth will prove productive.

WHEAL GOLDEN CONSOLS.—At Thorne's shaft, in driving the 107 north, the ground is good—lode 1½ ft. wide, producing 15 cwt. of ore per fathom. In the south ditto the ground is moderate—lode 10 in. wide, producing 6 cwt. of ore per fathom. At Young's shaft, the lode in the 80 ft. level is moderate—lode 10 in. wide, producing 6 cwt. of ore per fathom; in the 87 ditto the ground is good—lode 1 ft. wide, producing 5 cwt. of ore per fathom; in the slopes in the back of this level the ground is good—lode 1 ft. wide, producing 15 cwt. of ore per fathom. In the 77 the ground is good—lode 1 ft. wide, producing 3 cwt. of ore per fathom. At the engine-shaft we hope to complete the lift this week in order to sink to the 107. In driving the 97 south the ground is hard—lode poor; in the 87 ditto the ground is moderate—lode 9 in. wide, producing good stones of ore. In driving the intermediate level south the ground is good—lode 1 ft. wide, producing 6 cwt. of ore per fathom. At Webb's shaft, in sinking under the 70, the ground is moderate—lode 1 foot wide, producing 5 cwt. of ore per fathom. In Hick's winze, ditto, the ground is moderate—lode 1 foot wide, producing 4 cwt. of ore per fathom. At Maxwell's shaft, in driving the 70 south, the ground is hard—lode poor; in the 60 ditto the ground is good—lode 10 in. wide, producing 3 cwt. of ore per fathom. The tribute pitches are much the same as last reported.

WHEAL KITTY (St.

At the Devon and Courtenay Consols meeting, on Tuesday (Mr. W. A. Palmer in the chair) the accounts showed—Balance from the last account: 347. 18s. 9d.; labour cost for May, 1977. 18s. 4d.; June, 1764. 17s. 9d.; merchants' bills, 1217. 4s.—5307. 19s. 10d.—By cash for wharf, 51.; calls, 4887. 7s. 6d.: leaving balance against the company, 377. 12s. 4d. A call of 2s. 6d. per share was made, and 10 shares were forfeited for non-payment of calls.

Eyam, Maesyrwddu, Cootia Llys, Hendre, Deep Level, Merilyn, Talacre, Holywell Level, Ty-men, Orsedd, Penclyn, Bryntail, East Shallee, Gurtadynne, Kirkendright, Rhoswydol, Dyfngwm, and Bwlchgwyn, have sold lead ores.

The Devon Great Consols, we believe, will declare a dividend of 10% per share on Friday next.

At Crow Hill Mine (St. Stephens), the shaft has been cleared to the 35; the south lode can be seen for 20 fms. unworked, 2 to 3 ft. wide of good lead ore, which will not on tribute; the mundie has become softer, and of a sandy character, which will probably in depth will give place to a greater quantity of lead ore. The stratum is highly conical, and the ore assayed has given 60 ozs. of silver to the ton of lead. The north lode has not yet been cut in the 35 fm. level.

At West Powey, the ends at present are poor; a winze sunk on one of the shoots at the 60 is ore and kindly; the 70 is driving west on the main lode, with promising indications; the 90 has commenced to drive, but requires 12 months to reach the shoot; the 80 cross-cut driving south has a good lode gone down below the shoot for about 12 fms. long. There are other tunnel bargains on speculations which promise well. There is not much ore at present raising on tribute, the largest proportion being worked out, and the deeper levels not yet brought to bear. Miners are scarce, and ultimately the agent expects there must be a rise in the price of metals.

At Lewis Mines, the engine and sump-whirl shafts have been sunk to the 100, where the lode varies from 1½ to 4 ft.—spar, peach, and copper, with good indications. Præd's shaft has been sunk to the 90, and at the 80 a great many fathoms of backs remain to be taken away; the present end has improved, producing good stones of tin. In the 70 the lode is 1½ ft. wide—tribe ground. The total number of men, boys, and girls working is 341. It is fully expected that before the tin ground is taken away, the 60, 70, 80, and 90, which are not so cheering at present as they have been, will again improve, and enable the usual profit to be continued.

At Pridaux Wood, the 34 end, where a good course of ore was expected, has hitherto only turned out moderate work for tin, and not much copper. In the cross-course the lode on the east side is ore and kindly. The 24 and 16 ends are at present poor. The lode in the adit is producing good work for tin.

At Par Consols, since last report the gossan lode in the 150 fm. level has divided in two parts; the south part has cut tolerably good, with promising indications, having drained the levels above in less than an hour. The 135 is not quite so good as it was, but still ore and kindly; it is suspended for three or four months to sink a winze, which will open good tribute ground, and ventilate both levels. The prospects in this part of the mine are very good. The tin lode is much the same as last reported.

At Wheal Tremayne, in Boundary shaft, under the 93 fm. level, there is a little tin, and to value; the 93 east is worth 4s. per ton, the slope and back, 3s.; the 93 west is worth 3s. 6d. per ton, the slope and back, 3s. 6d. per ton, the 93 west is worth 3s. 6d. per ton, the slope and back, 3s. 6d. per ton.

At Yeoland Consols, we are informed, they are raising stones of tin, almost solid ore, coated with white prisms, and if no accident occurs, will sample on the 28th inst. between 8 and 9 tons of tin, the produce of one month. Altogether, the mine never looked so well as at present.

At Wheal Constance (by East Wheal Rose), the engine-shaft is holed to the 40, and they expect soon to be in a position to raise lead ore fast.

From Wheal Robins, the agent writes, under date of the 13th inst.:—"I never saw the old lode, or any other part of the mine, looking so well as at present in the 20 fm. level east; we have now a branch about 3 in. wide, of very rich grey copper ore; the lode, altogether, is about 2 ft. wide, and produces some rich stones of ore, independent of the branch, while the stratum around is all that can be wished."

Wheal Whitelegg (Devon) is looking very kindly, with promise of improvement; a rise in being made from the 42 to the 22 for ventilation, which is expected also to open dry ground.

The whole of the shares in Pencoese Consols have been allotted and taken. During the week, shares have changed hands in Alfred Consols, Condurow, Herodfoot, North Pool, North Wheel Bassett, Par Consols, South Caradon, Tamar Consols, Tinsford, Trehan, Treleigh Consols, West Caradon, Wheel Bassett, Bell and Lanarth, Calstock United, Caradon Consols, Carnarvon, Cannall, Cubert, Devon and Cornwall, Devon and Cornwall United, Devon Great Consols, Duke Cornwall, East Wheal Leisure, East Wheal Margaret, Gelfron, Gorn (Llandidow), Great Bryn Consols, Great Crinins, Great Wheal Alfred, Great Wheal Badden, Great Wheal Faw, Hawkmoor, Keneggy, La Min, Leeds and St. Aubyn, Mongearne and Trengwist, Mill Pool, North Downs, North Levant, North Wheal Unity, Old Wheal Bassett, Peter Tavy, and Mary Tavy, Pordle United, Respyr, Red Dragon, Rhoswydol and Bacheiddon, Rosewarne, Sidney Godolphin, Sifney Wheal Buller, South Charlotte, South Crenver, St. Day United, Swanpool, Tees Side, Trannack Consols, Treburt United, Treburt, West Basset, West Basset, West Crinins, West Fowey Consols, West Wheal Darrington, West Wheal Rhydydd, Wheal Agar, Wheal Carpenter, Wheal Cwpa, Wheal Erys, Wheal Franco, Wheal Guskus, Wheal Tychid, Wheal Trevena, Wheal Uny, Wheal Williams, Wheal Zion, Anna Maria, Bolenove, Cathedral, Clew Bay, Crow Hill, East Caradon, East Tremayne, East Uny Consols, East White Girt, Great Treghens Consols, Hill Bridge Consols, North British Burra, North Fowey, Portmooir, Silver Brook, South Devon Consols, West Stray Park, West Wheal Fortune, Wheal Fern, Wheal Samson, Ludecott, Wyndham Consols, &c.

In Foreign Mines, there has been little alteration during the week. The market opened on Monday firm, and has remained without any material variation. St. John del Rey were steady at 34½, until yesterday, when they fell to 34, although the last reports were not quite so favourable (speculation being hinted at in the amalgamation department), the returns were a fair average. Imperial Brazilian improved to 4½; National Brazilian were 2½; a shade lower. The mines connected with the West Indies have generally advanced. Metacals were done on Monday at 4½ to 5, and after various fluctuations, closed yesterday at 5½, being ½ higher than last week's quotations; Jamaica Copper, 2½ to 2½ prem. Liguanea of Jamaica and Port Royal also improved. United Mexicans were firm at 4; Sue River, ½ to ½ pm, a decline on last week; Oberhof remained without alteration at ½ to ½ prem.

At the Royal Santiago Mining Company's half-yearly meeting, on Wednesday (Baron de Goldsmid in the chair), the directors' report showed that the expenditure during the last six months had been 11,900l., and the receipts 8300l., showing a loss of 3600l. The chairman stated that after discharging the whole of their liabilities the company would have an available capital in hand of about 5000l., which sum, however, was inadequate to proceed with the undertaking, and it was, therefore, proposed that there should be a call of 1s. per share, which would increase the capital to 15,000l. Owing to the question of the payment of a bonus of 10% on the sale of shares, the directors considering the safest plan would be to postpone its payment until it could be increased, as there might arise an immediate requirement for the cash in hand. Further consideration was postponed till the next meeting.

At the Port Royal and St. Andrew's Copper Mining Company's meeting at the London Tavern, on Thursday (Wm. Gladstone, Esq., in the chair), a resolution was passed, authorising an amendment in the 18th clause of the Deed of Settlement, and preserving to the shareholders the right to have a ballot whenever they may please. The 85th clause was also amended, giving a general meeting power to dispose of shares as they may think fit. The capital is to be increased by the issue of 25,000 new shares, the proceeds of which, after deducting the expenses of the meeting, are to be applied to the purchase of the mine, and the balance to be paid to the shareholders. The chairman said he was happy to inform the meeting that very satisfactory accounts had been received by the last mail.

At the Grand Duchy of Baden Mines meeting, the accounts showed—Total receipts, 52,753. 4s. 11d.; and after every expenditure, including 1971. 5s. dividend, there remained a balance in hand of 4791. 17s. 1d. Voluntary reports of the directors, Prof. Arnold, and Mr. Walkingshaw, were read, which were highly satisfactory, for the whole of which a notice of the meeting, and very detailed reports, in other parts of this impression.

At the Oberhof Mining Company's meeting, held yesterday, at the offices of Mr. Kieckhefer (Mr. Browne, of Cornwall, in the chair), the accounts showed—Shares, 32,000l.; purchase-money, 24,000l.; ore, utensils, &c., 2600l.; shares belonging to the late G. Thomas, to be taken up by his executors 2000l.; preliminary expenses, 1297. 12s. 4d.; leaving a balance in favour of the company (including 1847. 16s. 11d. profit and loss), 5145. 4s. 7d. A dividend of 20 per cent. per annum, or 1s. per share for three months, was declared. The chairman observed that at the previous meeting, held on the 16th of April last, the report of the directors expressed an assurance that the payment of such a dividend would be made in July next, but such had been the success of the operations, that they were prepared, if the shareholders desired it, to make the dividend payable a month previous to the period stated, and that without touching a shilling of their capital. The shareholders would see by the financial statement that their expenditure had been gradual, and he hoped they would also be of opinion that it had been judiciously applied. He gave a lengthened and lucid statement of the mineral property known as the Oberhof, Vinar, and Vinden mines, and expressed his conviction that they abound in wealth, an opinion which he had arrived at after a careful inspection, accompanied by Capt. Lenton. After some discussion it was unanimously resolved that the dividend should be payable on the 1st of August next. Messrs. Davy, Hazlett, and Storey were appointed managing directors. A full report will appear in our next publication.

The Altan Mining Association have advised to the 28th June. At Baipais the water was receding fast, and they expected shortly to resume operations in the 25 fm. workings. At United Mines, at Woodfall, the lode was considerably increased in size, and its appearance encouraging. The slopes in Old Mine were looking promising, particularly to the eastward, where they yielded from 6 to 7 tons of ore per fm.

The Imperial Brazilian Mining Association have advised to the 31st June. At Gongo the tunnel had been put forward the past month 24 fms. 3 ft. Jointly the stamps produce had been small for a long time past, and 2000 tons worked monthly produced only 2 gns. per ton. From Camara, 49½ tons had been stamped during the past month, and produced 2 ozs. 2 dwts. of gold.

The National Brazilian Mining Association have advised to the 31st May. The progress westward to the Terra Chada was all but complete, and good samples were taken from the course of the adit. In the slope which Roberts had been opening the vein was very promising, and some good samples had been taken from the eastern part. The produce for the month ending 31st May was 573 38.

The Linares Mining Company have received advices from Captain Martyn, under date the 24 inst. There is an improvement in the engine-shaft; the lode is large, worth 1 ton per fm., and down 54 ft. below the 65 fm. level. In the 65, east of San Antonio, the lode is worth 2½ tons per fm. In the 55, west of Casualidad, 2 tons; the 55, east of La Fortuna, has improved. In the 45, east of Suerie, 1 ton per fathom; end of the cross-cut, 1½ ton. The 31, east of Thorne's, 2 tons; in Thorne's shaft the lode is large, worth 1 ton. The tribute department, on the whole, was not looking quite so well; and it was expected that the June ore would not reach the estimate of 20 or 30 tons. The estimate for July is 250 tons.

The Royal Santiago Mining Association have advices to the 15th June. There was very little improvement to report. Taylor's shaft was ¾ fms. under the 44; the lode was about 9 ft. wide, yielding about 6 tons of ore per fm. The winze in the 20, west of Taylor's, sinking from the 32, was looking better. The raisings for the month would be low, not beyond 40 to 50 tons.

The St. John del Rey Mining Company have advices to the 31st May. The gold extracted to the 15th May was 8403 ounces, from 400-91 cubic feet of sand (result of nine days' stamping), yielding 18-26 ois. per cubic foot. Mr. Morgan started on the 28th May for Rio Janeiro, with 12 boxes, containing 63,610 ounces, equal to 611-186 lbs. try of amalgamated gold, to be shipped by the Rio agents as usual, unless they can dispose of it at Rio on the terms already established with Sen. Falia. Gold extracted to the 31st May was 6912 ois. from 94-27 cubic feet of sand (result of 19 days' stamping), yielding 17-01 ois. per cubic foot. The produce of the first nine days averaged 934 ois. per diem, and the succeeding ten days only 851 ois. per diem. The stone continued poor, but not sufficient to account for the alarming depreciation in the produce. Stamps working 19 days, average 130-52 heads. The supply of stone had fallen off, owing to the holidays, but it was hoped an improvement would take place in the next month.

The Dalarna (Sweden) Mining and Smelting Company received, on Thursday, most satisfactory accounts from their mines. The resident director (Conrad Monro) says:—"The lode of ore from the shaft called Mellon is increasing in size, now that it has been further proved; its present yield is nearly 5 tons per fm. The Ko Mine is also improving, particularly in the quality of the ore. A level is being driven in the bottom of the 18 fm. shaft, and the yield is about 4 tons of ore per fm. There are three other shafts in work. The smelting works are in full operation. The first shipment of lead has been made. Stock of ore on hand, 164 tons; ore at furnaces, 20 tons; pig-lead in stock, 24 tons."

The Anglo-Californian Gold Mining Company have advices to the 28th May. The manager states that the condition of the rivers still impedes the progress of the heavy machinery. The Yuba had risen a night or two before two feet higher; this is attributed to the melting of the snow, as well as continued rains. He hopes to have the machinery up in the course of a few days, but he says "It is most harassing to be obliged to report these delays, and drain so heavily upon the patience of the directors and shareholders with such prospects before me, and with such means at my disposal;" and adds that the cause is beyond human control. The ore in opening upon the Brickledge was coming out beautifully, and maintained its character for richness. The engineer sent out from here in April had arrived at the mines.

A company has been formed at Genoa for the working of 25 mines in the island of Sardinia, several of which contained lead and silver. Counts Litta and Broome and General Albert della Marmora, who lately visited those mines, are at the head of the undertaking.

The gold mining share market has this week been characterised by a very decided feeling of depression. The demand on the part of the public is almost quite suspended. The accounts of the several companies come slowly to hand. Private advices are not generally encouraging; and the dealers are well supplied with shares. The consequence of this state of things is, that prices are now lower than they were last week. On Monday, the shares were flat: British Australian were done at ½ dis. to par, and Agua Fria 1½ to 1½ prem. On Tuesday, Australian Freehold, and London and California Gold Quartz, were done at a heavy discount. On Wednesday, there was little movement in the shares. On Thursday, there was a slight rally; but the market, owing to the complicated state of affairs with regard to the Turco-Russian question, must be considered in an unhealthy position. The arrivals of gold from Australia this week have been the General Hewitt, 34,000 ozs.; the Stebonkath, 46,000 ozs.; and the Syria, 6800 ozs. The transactions on the Stock Exchange will be found in the usual place. The non-official are—London and Liverpool Australian Gold Mining and Streaming, par to ½ dis.; Australian Mutual, ½ to ½ dis.; Australian Land and Mining, ½ to ½ dis.; Monarch Gold, ½ to ½ dis.; Chartered Australian Land and Mining, ½ to ½ dis.; Lewis Hill Range, ½ to ½ dis.; Garnett and Moseley, 2½ to 2½ prem.; Golden Mountain, ½ to ½ dis.; L'Aigle d'Or, ½ to ½ dis.; London and Virginia Gold, par to ½ prem.; Brucutu Gold, 1-16th dis. to 1-16th prem.; New South Wales Gold, ½ to ½ dis.; Melbourne, ½ to ½ dis.

In Miscellaneous Shares, the market has continued flat throughout the week. Land shares have remained without any material alteration; but with a downward tendency. Australian Agricultural on Wednesday fell 2½. Peel River and South Australian Land were also lower, but on Thursday they rallied, and on the same day Australian Agricultural changed hands at 67 to 69; these shares were yesterday divided, and now stand at 25½, shares with 177. 10s. paid, instead of 50l. with 35l. paid—they closed at 33½ to 34½, thus maintaining the improvement. Peel River, 1½ to 1½ pm. British American Land, 66 to 68; Van Diemen's Land, 16 to 17, and South Australian Land, 40 to 42 the early part of the week, but receded yesterday to 39 41. Crystal Palace shares were freely dealt in at 2½ to 3 prem.

HULL, JULY 14.—Our correspondents (Messrs. T. W. Flint and Co.) state that transactions in mining shares are at the smallest possible extent. There is no inclination evinced to press sales at the reduced quotations; but, on the other hand, there is not the slightest disposition to invest further until there is more life in the market.

LEEDS, JULY 14.—Our correspondents (Messrs. Henwood and Co.) announce a decidedly improved feeling for mining transactions. Sales have been effected in James, Pencoese Consols, Yorkshire Mining Company, Caradon, and Wheal Fortune (South Tawton). Enquiries for Polimoor and Wheal Procter, at improved rates.

THE COLLIERIES EXPLOSION AT OLDHAM.—The inquest on the bodies was resumed yesterday, at the Angel Hotel, Oldham, before Mr. D. F. Dearden, coroner. On Saturday last Thomas Driver, and Thomas Inman, both aged 22, both unmarried, died of injuries received from the accident—making the total number of deaths 20. The two Government inspectors and other witnesses had still to be examined when the report left.

MINES IN EGYPT.—Mr. Bryant, in the Evening Post (U.S.), says, "When I was in Upper Egypt I fell in with an Indian who was employed to obtain sulphur from a mine among these mountains. They are incredibly rich (said he) in beds of ore of the most beautiful kind, in which the sulphur is contained. It is not wanted for want of fuel. Egypt has no mines of coal; all that is used in her steamers and her manufactures is brought from England. She has springs of mineral oil, the indication of beds of coal, and wherever they are to be found, the Government has made excavations to a great depth and at great cost, but without success. An Arab, in wandering among the mountains near the Red Sea, not long since, found a little pool of quicksilver where it had flowed from the rocks. He attempted to scoop it up with his hands, but it slid through his fingers; he then drew it up into his mouth, filled with it, and heaved it down, and brought it home. He was taken ill immediately afterwards and died, probably from the effect of the quicksilver he had swallowed, so that the spot where he found it is still unknown, though diligent search has been made for it."

Transactions on the Stock Exchange.

Shares.	Companies.	Paid.	Last Price.	Business Done.
100000	Agua Fria	1	1½	1½ pm.
30000	Anglo-Australian Gold	1	1½	1½ pm.
100000	Anglo-Californian	1	1½	1½ pm.
10000	Australasian	2	1½	1½ pm.
10000	Australian	5	2½	3
60000	Australian Cordillera	1	1½	1½ dis.
100000	Australian Freehold	1	1½	1½ dis.
60000	Ave Maria	1	1½	1½ dis.
72000	Baden, Grand Duchy of	1	1½	1½ dis.
100000	British Australian Gold	1	1½	1½ dis.
210000	Carsons Creek	1	1½	1½ dis.
100000	Colonial Gold	1	1½	1½ pm.
350000	Copper Miners of England	Stock	60	70
70000	English and Australian Copper	5	2	1½ dis.
100000	Great Nugget Vein	2	1½	1½ pm.
20000	General	20	14½	1½ pm.
100000	Lake Bathurst	1	1½	1½ pm.
60000	Liberty	1	1½	1½ pm.
50000	London and Calif. Gold Quartz	1	1½	1½ pm.
100000	Marquette	1	1½	1½ pm.
20000	Mexican and South American	9	7	8
60000	New Granada	1	1½	1½ pm.
200000	Nouveau Monde	1	1½	1½ pm.
100000	Port Phillip	1	1½	1½ pm.
60000	Quartz Rock	1	1½	1½ pm.
30000	South Australian	1	1½	1½ pm.
70000	Waller	1	1½	1½ pm.
100000	West Granada	1	1½	1½ pm.
100000	West Mariposa	1	1½	1½ pm.
100000	Yuba	1	1½	1½ pm.

MISCELLANEOUS.

Shares.	Companies.	Paid.	Last Price.	Present Price.
30000	Australian Agricultural	17½	33	33
10000	British American Land	38½	60	60
10000	Canada Company	32	61	61
100000	Crystal Palace	2	2½	2½
120000	Peel River Land and Mining	5	6½	6½
100000	Peninsular and Oriental Steam	50	77	77
100000	Scottish Australian Investment	1	2½	2½
12700	South Australian Land	25	30½	30½
10000	Van Diemen's Land	28½	15	15

IRON AND COAL COMPANIES.

Shares.	Companies.	Paid.	Last Price.	Present Price.
32000	Aubin (coal and iron)	1	5½	5½
40000	Australasian (coal)	5	10	10
8000	Blaenavon (iron)	13½	7½	7½
26000	British Iron	1	1½	1½
50000	Cumberland Hematite Iron Ore Co.	1	1½	1½
75000	New South Wales Coal Company	1	1½	1½
50000	Portland (iron)	2	2½	2½
10000	Rhymney Iron	30	27½	27½
10000	Do. New	10	8½	8½

CASTING IN GLUE.—If a model is so much sunk and so much degraded that you cannot get a plaster cast of, a mould may be obtained by pouring glue upon it. In this manner a cast of a model may be taken in the usual manner, by cutting the representation of the original in plaster. Isinglass dissolved in water, and mixed with a first mixed with flake-white, in the state of powder. The similar, but it is the whole in boiling water, when the glue will melt and the plaster, leaving a perfect cast of plaster grapes.—The Brass and Ironfounders' Practical Treatise.

LEAD ORES.

Sold on the 8th July.

Mines.	Tons.	Price per ton.	W. Chas. & Co.
Eyam	25	£15 0 0	W. Chas. & Co.
ditto	4	12 15 0	ditto
Maesyrwddu	71	£12 12 0	Newton
ditto	17	15 0 0	ditto & Co.
Cootia Llys	18	13 10 0	ditto
Hendre	8	12 2 0	Mather & Co.
Deep Level	64	11 16 0	Walker, Parker, & Co.
Merilyn	40	12 2 0	Mather & Co.
Talsore	50	11 8 0	Walker, Parker, & Co.
Holywell Level	28	13 6 0	J. P. Eytton, & Co.
Ty-Men	20	12 15 0	Newton, Keates, & Co.
Orsedd	6	12 5 6	Walker, Parker, & Co.
Penclyn	67	11 1 0	Newton, Keates, & Co.
Bryntail	36	10 18 0	Mather & Co.
East Shallee	23	13 15 0	Walker, Parker, & Co.
Gurtadynne	17	12 10 0	ditto
Kirkendright	11	11 8 0	Newton, Keates, & Co.
Rhoswydol	11	11 10 0	J. P. Eytton, & Co.
Dyfngwm	10	11 8 6	ditto
Bwlchgwyn	60	11 16 0	Walker, Parker, & Co.

COPPER ORES.

Sampled June 22, and sold at Swansea, July 12.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Berehaven	126	10½	£9 1 0	Cuba	67	21½	£20 2 6
ditto	124	10½	9 9 0	Glasgow Slag	65	21	1 5 0
ditto	114	10½	9 7 0	ditto	63	23	1 5 0
ditto	113	10	9 1 0	ditto	28	23	1 5 0
ditto	92	10	8 18 6	ditto	13	23	1 0 0
ditto	83	10	9 0 0	French Slag	73	7½	5 0 6
Cobre	96	14½	13 4 6	ditto	9	5½	4 0 0
ditto	91	15½	13 6 0	Waterloo Slag	45	23	1 0 0
ditto	80	17½	13 7 6	ditto	14	23	1 0 0
ditto	48	16½	14 9 6	ditto	10	7½	5 12 0
ditto	39	24½	22 5 6	ditto	8	11½	9 15 0
ditto	29	20½	18 10 0	Ballymurtagh	40	5	4 5 0
ditto	11	68½	60 0 0	Molland	37	5½	4 6 6
ditto	10	28½	21 16 6	Australian	14	35½	31 5 0
Cuba	101	14½	12 11 6	ditto	8	36	31 5 0
ditto	100	14	12 9 6	Concorree	4	42½	40 0 0
ditto	81	14½	12 13 0	Gloster Slag	5	53	26 0 0

TOTAL PRODUCE.

Berehaven	539	£5968 15 0	Ballymurtagh	40	£170 0 0
Cobre	404	6688 3 6	Molland	37	160 0 0
Cuba	349	4890 12 0	Australian	22	687 10 0
Glasgow Slag	172	211 5 0	Concorree	4	140 0 0
French Slag	82	435 13 6	Gloster Slag	5	130 0 0
Waterloo Slag	77	238 14 0			

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Companies.	Tons.	Amount.
Copper Miners' Company	210	£2350 2 3
Freeman and Co.	109	1283 10 0
Grenfell and Sons	22	687 10 0
Sims, Williams, and Co.	290	2777 3 6
Vivian and Sons	446	3886 8 0
Williams, Foster, and Co.	243	2367 14 0
Mines Royal	243	2367 14 0
English and Australian Company	170	2975 18 9
Total	1844	£19,721 3 6

NO SALE on Tuesday, 26th July.

AVERAGES.

Correspondents.

THE COST-BOOK SYSTEM.—We believe that the gentlemen who have submitted to competition will meet early in the month of August, and will be fixed as to which papers will be the successful ones.

MR. PIDDING'S SHARE.—We have not yet had any account as applied for by Mr. Pidding's share, but it is promised on first appearance, or what has delayed it has failed to effect before this. (The address of Mr. Pidding, the being of Mr. Pidding, Kent; but we find he has left there, and that his present residence is J. J. (Wadebridge) asks for account of the sale of produce that was returned from the mine; and how long before another dividend will be declared.)

MR. PIDDING'S SHARE.—The variation in prices may have arisen from the price of the mines not appearing so good, or from a number of shares being forced to sell. Application should be made to the respective offices, for the reasons on which the shares are not being issued, and if the information be considered insufficient, then a letter should be addressed to the Journal, calling for further explanation may be deemed requisite. We are not dealers in shares, but only those prices which are forwarded to our office, or we can otherwise be forced, but the price realised, under the circumstances, can hardly be considered the fair market value. If a purchaser, "O. P. Q." should apply to a broker, from whom he will receive all necessary information.

BOTTLE HILL.—J. S. asks, what the branch cut in the 50, said to be of "first-rate quality, 9 inches wide," nearly three months ago, is turning out, as no sales of produce appear?

EAST DING DONG MINE.—It is in 1024 shares, paid-up calls 11. 3s., and 24-inch cylinder engine erected. It sold in the last working, about seven years since; is situated in the parish of Madron and Gulval. Pursuer, James Furness.

NORTH DING DONG MINE.—It is in 1024 shares, paid-up calls 11. 3s. Produced in last working, about seven years since. No engine erected. Pursuer same as above, and managing agent of both Capt. Matthew White, Marazion.

GREAT CHINNIS.—Q. Z. wishes to know whether the new lode expected to be cut in the adit in May last, that was to unite with the Regent lode, and expected to turn out wonders, has really been cut or not; if it has, of what value has it proved?

DEVON BURRA BURRA.—Sir: Frequently of late have persons had to complain of the injustice done their property by an erroneous statement in your Share List. This, no doubt, is done without your cognisance, and with a view to accomplish some nefarious purpose. Many are the remedies suggested to prevent a continuation of this evil practice. To me, it appears evident a very successful one would be for you to show your readiness in giving up the authors' name, and by way of compensation, I should feel much obliged by your inserting in the columns of your next week's Journal the authority from whence you inserted the Devon Burra Burra shares at 50. per share, as there has no transaction taken place to authorise any one in doing so. On the contrary, shares have never been in such demand since the commencement of these mines as they are at present in this neighbourhood. —JAMES WHITE, Pursuer: Tavistock, July 11.

Captain W. Verran is at present in North Wales, for the purpose of inspecting mines. He leaves there in the early part of next week for Scotland, then back through South Wales for the north of Devon and Cornwall. All letters forwarded to his residence at Llanidloes, North Wales, will reach him.

A Careful Reader.—If he wishes profitably to invest in mining property, should also be a careful purchaser. This he certainly is not, if he "purchased largely" from the "assurance" held out by a dividend of the 27th of Nov., 1852. This assurance of a dividend is a paragraph of three lines, as follows:—"Weal Golden, see are informed, have now funds in hand for another dividend of 3s. per share, which will shortly be declared. The productions of silver-lead ores is greatly improved, and the value advancing, in common with all other ores, rapidly." Our authorities for all reports and statements are the agents and committees of the several adventures, and for the authenticity of which they are, of course, responsible.

SWANPOOL.—"R. R." (Penryn) desires our attention to the fact, that no sales of lead or other produce has been obtained from this concern, although 8000l. has been expended on it.

WEST WIRRAL TREASURY.—It was erroneously announced, last week, that this mine had declared a dividend of 10s. at the meeting on the 4th inst. It will be seen by the account in the usual column that the balance in hand was only 126l. 7s. 3d.

A Cornish Miner.—He calls the attention of capitalists to the fact that, while so many new mining projects are being brought before the public, many more promising speculations are to be found in old suspended mines, which have been idle 20 or 30 years, and which, though they might not have paid when stopped, the present price of copper, and our improved appliances, would render many of them highly profitable speculations.

DINAS GREAT COPPER MINE.—J. Green (Stourport), seeing that Professor White has examined this property, and "speaks in decisive terms as to its value," would like to have his opinion corroborated by some practical agent of the locality, for the guidance of himself and friends.

WORTHING COPPER MINE.—Last week the price of shares was quoted at $\frac{1}{2}$ 1, instead of $\frac{1}{4}$ 3; the error arose through the number of shares being increased.

T. L. (Brighton).—The enquiries shall be answered next week.

TREATHY MINE.—Sir: As no notice has been taken of the letter of Mr. N. Ennor, inserted in the Mining Journal of July 2, it would be satisfactory to the shareholders if the pursuer would give some explanation as to how the accounts are made out, and the reason why a call of 11. 10s. per share was made on the 16th of May, when the balance-sheet showed the mine to be in debt only 282l. 3s. 10d., and for the last twelve months previous the calls averaged 10s. per share every two months. Dissatisfaction exists amongst the shareholders at so great a call being made, and many have forfeited their shares rather than pay it. It would also be very desirable to have the mine examined and reported upon by some disinterested agent; a course calculated not only to remove any doubts which may exist in the management, but to prove satisfactory to the adventurers. —A SHAREHOLDER: July 12.

The letter of Mr. John Dolphin, on the Northern Mining Districts—No. VIII., shall appear next week; also one from Mr. D. Muehl, on Steam Worked Expansive.

FIXED PRICES.—Sir: I have read with pleasure your various letters on "Fixed Prices of Mining Shares" and "Secretaryships," both *pro* and *con*, and I do not think Mr. Lane has been proved to be wrong in any of his arguments. I should hail with delight a system which would fix prices of mining shares as unequivocally as are those of stocks and railway shares; and I conceive advertising the prices, as complained of by "Beppo," is a stepping-stone to the end so earnestly desired by mining shareholders generally. It is but natural to receive such opposition in things of this sort, but Mr. Lane has right on his side. —ANTI-BEPPU: Hall of Commerce, July 15.

FIXED PRICES FOR MINING SHARES.—Sir: Seeing of late in your invaluable Journal much discussion the publication of "fixed prices" for mining shares, I will, therefore, Mr. Editor, with your permission, make a few impartial remarks thereon; as from what I can perceive from the writings of "Beppo" and others, the discordance at present only exists between the "broking" part of the mining community. To eradicate this, or at least to remedy this little ill-feeling existing in the bosoms of this generally happy community, allow me to civilly put a few questions to them.—1. Are not "fixed prices" for every description of merchantable goods regularly published? Then why not publish "fixed prices" for mining shares, bearing in mind that they are to be authenticated and established, and not like the cases which "Beppo" and W. L. Oliver gives in your last week's Journal as illustrations? Another "reason why" I assign that "fixed prices" should be regularly published is on account of the facility it affords the uninitiated in mining.—side example: A, an uninitiated capitalist, having not the slightest knowledge of "mining sharebroking," is in want of a certain quantity of shares in a certain mine. He, perhaps, accidentally or otherwise, is introduced to your Journal, and there sees the different broker's advertisements, with their prices for the identical shares he is in quest of, and, of course, selects the party to whom to make application for those shares.—thus, rendering the whole affair plain and easy, and the means of establishing a medium between the capitalist and the broker. We will now briefly advert to this instance under the old *regime*. A, requiring certain shares, would probably proceed to the office of P., a broker, and there make known his request. It is well known too frequently to have happened, that when the broker once got a person of this description into his office, he has not allowed him to escape before being let into at least some of the mysteries of his craft. Thus all I should think would admit the propriety of publishing "fixed prices" for mining shares generally, so it would, if adopted by the whole of the London brokers, I feel convinced, be of immense ultimate advantage to capitalists and adventurers. Before concluding, I must express my satisfaction with the letters, and the non-diffidly which Mr. J. S. Lane has evinced in addressing the fraternity in his communications published in your valuable Journal.—"SIO" (of Tavistock): July 12.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JULY 16, 1853.

We commented, in our last Journal, at some length on several of the anomalous phases which the present laws of partnership present, with a view of suggesting, that if the Cost-book System should be made the subject of enquiry, and of subsequent legislation, so far from being embarrassed by it, it may be relieved from their imperfections. It is the interest of the mining community that the cost-book plan of joint-stock associations should be extended, so as to enable it to embrace the vast variety of industrial projects which, in the present improved state of science, and in the wide-spread relations of this country with every part of the globe, invite our capital and our skill, and present opportunities for their employment in enterprising adventures. It is impossible to calculate the advantages which England would derive from a well-regulated and well-defined system of codification of the laws of partnership, which, if it met the approval of the British public, would probably, before long become international, and be adopted by other states. Legislation is too often guided by fleeting and casual circumstances, while it ought to be alone governed by permanent principles; and it cannot be overlooked that, although the United States of America inherited their British origin the common law of England, in the revised statutes of New York they have anticipated their ancestors, by adopting and legalising the cost-book system. Until the Cost-book Principle in this country, which is ana-

logous to that system, shall be relieved from all apprehensions of capricious interference from courts of equity, it can never be settled on a secure basis. Let us, for instance, assume that the discretion of equity judges should extend itself entitled to apply to cost-book associations the principles to which we shall now refer, and which govern in their courts joint-stock partnerships, could any body of men rest secure? While all the partners in a joint adventure are treated as joint owners, and are obliged at law to join in all actions on contracts, following the rule with respect to freight earned by a general ship; and this Lord TENTERDEN laid down to be the distinction between actions on contracts and actions on wrongs; courts of equity, adopting the decision of Sir WILLIAM GRANT, in *DEVAYNES v. NORIE*, afterwards affirmed in the House of Lords, declare, "that a debt due by a firm is several as well as joint, and may be treated as the separate debt of each partner. The rule in equity, therefore, in suing the members of a firm, is the very converse of the rule at law, where they are obliged to sue. This state of the law leads also to the anomalous conclusion, that the creditor of a firm has in equity, on the death of a partner in that firm, more extensive and advantageous remedies against his estate than the creditor would have possessed if the debtor were living. This singular extension of liability has naturally alarmed cautious men, and has tended necessarily to discourage in their eyes undertakings in which they could not have in their own hands, the entire control. It is time to regulate or restrain that power which enables the assignees of a bankrupt or insolvent partner to wind-up the firm, by a legislative declaration, that they should either sell, giving a power of pre-emption to the surviving partners, or, by adopting the position of the party whom they represent, enable a prosperous concern to proceed as before, on the terms of their being associated in the management, under due regulations.

Prudent legislation would also clothe joint-stock societies, not incorporated, with some of the peculiar privileges which protect incorporated companies. Should the latter become unfortunate, the corporate property alone is sacrificed; in case of the former proving insolvent, in the language of Lord ELDON, "the individuals must suffer to their last shilling and their last acre." The very exception in the Winding-up Acts of cost-book companies from their operation and provisions implies that, in case such associations, either from mismanagement, misfortune, or fraud, should be driven to resort to judicial interference, they must be necessarily remitted to the original jurisdiction and machinery of the Court of Chancery. These were in themselves found such calamitous remedies, that the Winding-up Acts were expressly devised and passed as remedial measures for those who had no other resource but that resort. The Stannaries Court, within the defined limits of its very peculiar and restricted jurisdiction, does exercise a simple and summary power of winding-up cost-book companies, in the events to which we have alluded; and it seems strange that the Legislature, while it has, as yet, restricted that jurisdiction to Cornwall, should not, at the same time, have provided the same process for cost-book companies, which it has inferentially legalised beyond its precincts. The existing laws, in this respect, clearly require revision.

It has been well observed by Lord BROUGHAM, that "great means of shortening litigation, are to be found in an enlargement of our laws of arbitration." A tribunal for that purpose exists in France, under the name of the *Cour de Conciliation*; and the French laws have their *arbitrament force*, or compulsory arbitration. We possess in this country a statute, generally known as *BARON PARKE'S ACT*, by which Courts of Law are enabled to refer cases pending before them to arbitration; but, strange to say, it has been solemnly decided by the late VICE-CHANCELLOR of England, and the decision acquiesced in, that the Act itself is confined to courts of common law, and that neither its powers nor provisions extend to courts of equity. With all the boasted reforms of our equitable jurisprudence, arbitrators appointed by the Court of Chancery, to which court the affairs of partnerships and joint-stock associations are generally referred, have no authority to administer an oath, and, of course, no power of punishing for the most deliberate false testimony. It is plain, therefore, that a reference to arbitration from the Court of Chancery is, in these enlightened days, in most instances, "a mockery, a delusion, and a snare." A well-devised system of compulsory arbitration, applicable alike to differences between shareholders themselves, and between companies and the public, would tend to tranquillise the minds of many timid men, and to render investments in mining operations doubly secured. A precedent for such power can be found even in this country in the Acts regulating benefit societies; such a power is even now very commonly introduced into co-partnership deeds. Its adoption as a general legislative enactment would be highly desirable, and we cannot too earnestly recommend a measure of consolidation, simplifying, arranging, and assimilating the laws of arbitration. Courts of conciliation are not confined to France alone, but exist in many of the large continental cities; and a legalised tribunal on the same plan may be, perhaps, usefully attached to each of the several chambers of commerce in our commercial towns. The details for their regulation must be, of course, matter for future consideration; but as the Scottish courts have even now official accountants attached to them, we would venture to recommend the adoption of similar functionaries. The machinery in the English courts, as well of equity as of law, is very deficient in taking and adjusting partnership and all other mercantile accounts. By the laws of France, partnerships and other commercial establishments are obliged to keep their books according to certain specified forms, which are stamped, and made evidence; and it cannot be denied, that some similar regulation would authenticate and simplify transactions, and save vast expense and inconvenience in these countries. Arbitrators ought, at all events, to be armed with summary powers of summoning all parties and witnesses before them, administering oaths, punishing for their violation, and, if necessary, transferring books and accounts to authorised accountants, who should, for the purposes of all necessary enquiries, be invested with similar powers. We repeat, that our observations have been intended mainly to apply to the improvement, legalisation, and extension of the Cost-book System, and to adapting its very simple form to such legislative ameliorations of our system of jurisprudence as the Royal Commission may recommend, or Parliament adopt. Our limits being necessarily restricted, we recommend those who are interested in studying the principles on which associations on the cost-book plan are formed and conducted to peruse Mr. T. BAILEY'S excellent *Treatise on British Mining and the Cost-book System*. As the Royal Commission proceeds, if its sittings be public, we shall from time to time invite the attention of our readers to the evidence which shall be given before it, and to the result.

Among the many communications which have lately appeared in our Journal regarding the COPPER TRADE, we must draw especial notice to a correspondent's remarks, which will be found in another column. On this occasion we have studiously refrained from entering into detail, or making any comments on the relations between the smelting and mining interest, although previously our opinions at different times, when this important question was under agitation, have been decidedly given. To adjust the differences between these opposing interests would be a task of no ordinary difficulty, and until there is more combination and union among the mining adventurers, anything approaching to a solution of this knotty question is almost, if not perfectly, impossible. That each separate mine should erect its own smelting-works would be ridiculous, as it is well known that an admixture of ores of different qualities is required to effect a successful smelting, the one being a flux to the other; and where independent companies have established reduction works abroad, the secret of their success has been that they have been enabled, from their own possessions, to obtain ores of several per centages, and the matrices varying from each other: in other instances, such as at Hamburg, they have generally purchased foreign ores, which are of a fusible nature and easy of reduction. That an association of those interested in mining enterprise could have the capital and form an independent smelting-works there can be little doubt, but would it be enabled to compete with the gigantic monopolists of Swansea? We think not; the heads of these establishments are ready at any time to profit by any favourable circumstances that may arise on the moment. Having nothing to consult but their own interests, they are in a position to decide promptly and act energetically, while any person who should be at the head of a "Miners' Smelting-works" would be obliged to submit his whole course of proceeding to the decision of a committee, who, in many cases, as our readers are aware, are chosen more from their name and position than eligibility and knowledge of the business they are called upon to preside over; and until practical men are appointed to have the full control of such an establishment, with full liberty of action, and powers untrammelled by any act of incapables, the Swansea monarchs may defy all attempts to shake them on their brazen thrones.

From our correspondent's remarks, it will be seen that the latter end of last year the price of copper was 102l. 10s. per ton; on the 4th Jan., in

the present year, it advanced to 107l. 10s. per ton; on the 31st Jan. to 126l.; and on the 18th Feb. to 135l.: on the 12th April it was reduced to 18l. per ton, and a further reduction of price took place on the 1st June of 9l. 10s.—thus, within the short period of five months, an advance of 27l. 10s. per ton was made, while a decline to the same amount took place, the price now being 107l. 10s., the same as in January. This is surely not a healthy state of things; and as it is clear the price is not regulated by the supply and demand, but by extraneous circumstances, it is equally clear that some searching reform is necessary. Copper enters largely into all our articles of machinery and domestic purposes, and it is not feasible as important an article should be left entirely to the direction of an irresponsible body. It acts against the conscience, and is a great injustice to the small trader, who has to purchase his materials at a heavy rate, while the public grumble if he charges more than the ordinary price for the articles he manufactures. That it tends to check mining adventure no one will deny. It may be urged that many poor mines, which otherwise would not pay, are brought into play when copper is at a high price, and often, on the faith of this, machinery is erected and men employed; so soon, however, as an arbitrary reduction takes place, a corresponding depression ensues, the mine is abandoned, the men discharged, the materials sold at less than one-fourth their cost, and the unfortunate shareholders find themselves considerably out of pocket. Not looking at all the circumstances of the case, or tracing the evil to its right source, they condemn mining *in toto* as an investment. In the meanwhile, the sett is left languishing until another artificial rise takes place, when it is again taken up, and the system above related again repeated.

In truth, though we may endeavour to blink the fact, we cannot disguise from ourselves that at this present moment the miner, manufacturer, and consumer are all at the mercy of the so-called "Smelters' Association"—constituted to protect themselves at the expense of all who may require the article they deal in. That a large capital is embarked by each of these parties in their several undertakings no one will attempt to deny—a fair and legitimate profit they are entitled to, but we know that they obtain more: not only do they get it from the miner to an enormous extent, but likewise from the manufacturer, whose business they are perpetually tampering with. He may buy copper at a very heavy rate to-day from one of this body, who the next, from some unexplained cause, may be the means of reducing the price considerably. The smelters have often been appealed to to remedy this ill, without any response from their side; so that all attempts in that quarter are futile. It is pitiable that such a state of things should exist, and it ought to be abolished; but we must confess there are no prospects of this until a combined and active union shall take place between all those concerned in the production of copper ore and the consumption of the metal.

In the MINING JOURNAL of the 18th June, we noticed at some length a plan for obtaining gas for artificial illumination by the decomposition of water by electricity; and we are pleased to find, from a prospectus now before us,—that several gentlemen of capital and influence in the commercial world and the upper classes of society are associated for carrying out the object, and that a company has been provisionally registered, under the title of THE ELECTRIC GAS COMPANY. The means of decomposing water by the agency of electricity, and reducing it to its component elements, hydrogen and oxygen, have long been known to science; but no attempt to make them commercially valuable has, we believe, ever yet succeeded, from the great cost incurred, particularly when the decomposition is effected by the galvanic battery. The principle employed is that of "magneto-electricity"—the production of an electric current—by the rapid rotation of a metallic element in close approximation with a powerful permanent magnet, at an almost nominal cost. By the arrangement, an illuminative gas is produced of great superiority. Dr. LEECH, Prof. HOLMES, and Mr. LEWIS THOMSON, the eminent consulting and analytical chemist, have reported on the process, of which they speak in the highest terms. The gas is stated to be most beautifully adapted for illumination, especially suitable for heating purposes, free from all the deleterious properties of coal gas, without its disagreeable odour, non-explosive in a body, even on the approach of flame, so different from hydrogen obtained from water in the usual manner, and can be supplied to the public at 60 per cent. less than the present cost of gas; while the whole arrangement of pipes, burners, &c., will efficiently answer for its conveyance and use. We shall endeavour in an early Number to give a detailed description of the beautifully simple apparatus employed.

The annual general meeting of proprietors in the SOUTH AUSTRALIAN COPPER MINING COMPANY was held at the offices of the company, 17, Gracechurch-street, on Wednesday, the 13th inst. (J. THOMPSON, Esq., chairman of the committee of management, in the chair). The report of the committee was of a very satisfactory character, a brief summary of which we inserted in last week's Number. It stated that the financial and general affairs of the company were in a healthy state; and that, while the present position of the company must be a matter of gratification, its future prospects would inspire general confidence. That when the committee came into office they found the financial affairs of the company in a confused state, with scarcely a moiety of the capital raised, and with heavy liabilities for machinery, while it appeared nothing had been done in the colony for prosecuting the works;—that the first steps taken were to place the financial affairs in a sound position, a portion of the shares were sold, and a net premium secured of 2637l. 12s. 6d., which would be dealt with as the meeting might determine;—that they had been fortunate in the selection of their machinery and staff, and perhaps a better set of miners never left England. The machinery was of the very best description, consisting of a pumping engine, 60-in. cylinder, three boilers, 12 tons each, pumps and pitwork, a 20-in. double cylinder engine, with crushing hauling, and stamping machinery, raft and water-wheels, connecting gear, jiggers, bobs, capstans, shears, chains, ropes, railway iron and wheels, waggons, engines, smiths, masons, and carpenters' tools, mining implements, and duplicates of the most important portions of the machinery; and that, in consequence of the advance in the price of iron, the intrinsic value was increased 1500l. or 2000l. since the purchase. That it was probable that some of the miners who sailed in Feb. last are now at work;—that as gold had been discovered on the banks of the Echuca, a river passing the company's property, it would be proper to give the committee power to lease the diggings, or work themselves, but it was not intended to allow the company to be diverted from its original purpose—copper mining;—that the most satisfactory representations had been received of the valuable nature of the property;—that anxiety in the colony as to labour was subsiding;—that many had left the gold diggings, had returned to the mines, and to other occupations, and that there was every reason for looking forward to early and large returns from the undertaking;—that the company possess unusual advantages; in addition to the mineral property, houses, blast-furnaces, &c., they have 636 acres of land, of which 120 acres are laid out as town lands in Strathalbyn, only 30 miles from the rapidly increasing and important city of Adelaide, with good roads, which land had greatly improved in value, and it is believed that no copper mine in the colony is more favourably situated;—that the committee have endeavoured to conduct the company's affairs with the strictest economy, and that they would continue to do so.

The statement of accounts was then submitted, showing capital subscribed, 40,640l.; premiums on shares sold, 2637l. 12s. 6d.; interest, 51l. 19s. 1d.—13,329l. 11s. 7d.—Purchase of Strathalbyn estate, 20,000l.; salaries, travelling expenses, engineer, machinery, steam-engines, tools, freight, insurance, wages, and sundries, 13,965l. 19s. 3d.; London office, 1190l. 17s. 6d.; due from persons formerly connected with the company, 761l. 16s. 7d.; cash and securities in London and Australia, 7410l. 19s. 3d.—43,329l. 11s. 7d. A report from the auditors was also read, analysing the above accounts, which they stated they had found perfectly correct, and in every case agreed with the vouchers; the reports and accounts were then unanimously adopted. A discussion ensued respecting the reservation of 5000 shares for the colony, as stated would be the case in the original prospectus. Capt. GREEN and Mr. DUFFA, two of the former directors, and a few shareholders, considered it would not be keeping faith with the colonists unless the promise was fulfilled; but the chairman, Mr. VALLANCE, the solicitor, and others, clearly showed that not only had no actual promise been made, but no single individual had applied for a share; and as so long a period had now elapsed, the option should no longer exist, but the 8000 shares in hand be kept for the benefit of the company. They had sent out 1000 shares to qualify the colonial board of directors.

Resolutions were then passed, placing 200l. at the disposal of the directors for their services from the 6th Dec. last to the 30th June, and 20l. to the two auditors. A committee of three was also appointed to consider if any and what remuneration should be awarded to Mr. ANIMATED, the

THE LEAD TRADE.

The following is a statement of the produce of some of the principal lead mines for the quarter ending June 30, 1853:—

Mines.	Tons.	Amount.
Liburne	739	£11,387 15 6
Foxdale	550	9772 10 0
Newtonards	626	9434 10 0
Grassington and Cononley	489	7458 0 0
Wheat Mary Ann	311	7377 19 6
South Tamar	270	4184 7 0
Lasey	290	5002 10 0
Westminster	325	4673 7 6
Cwmystwith	267	3913 15 0
Trelawny	165	3441 8 0
Maesyrwddu and Coetia Llys	231	3577 7 6
Tamar Consols	162	3561 15 0
Dyllife	167	2911 13 3
East Wheel Rose	166	2838 10 6
Deep Level	190	2662 7 6
Maesysaf	180	2549 10 0
Hedderfoot	135	2370 5 0
Luganure	178	2310 15 9
Strontian	145	2121 0 0
Wheat Golden Consols	130	2055 0 0
East Shallice	130	1964 17 6
Merilyn	107	1912 15 0
East Darren	100	1877 0 0
Eyam	123	1864 18 0
Minera	125	1731 5 0
Bwlch Gwyn	120	1737 5 0
Nanculke	86	1658 0 0
Cwm Eryn	87	1625 5 0
Gartnafnydd	30	1575 6 0
Gedolyn	30	1371 5 0
Cwm Cwm Brynno	100	1819 0 0
Wheat Exmouth and Adams	105	1464 7 6
Holywell Level	92	1416 16 0
Penelun	113	1414 12 6
Black Craig	100	1312 10 0
Drigith	72	1271 0 0
Nantoes and Penblew	85	1245 0 0
Bodryddan	89	1227 2 6
Milner	80	1113 10 0
East Tamar	61	1111 14 6
Eggar Lee	75	999 0 0
Talare	65	940 2 6
Jamaica	74	841 16 0
Pantymwyn	62	792 10 0
Great Wheel Baddern	55	761 0 0
Bwlch Consols	55	742 0 0
Cwm Gwraeg	41	738 0 0
Cubert United	40	725 0 0
Vale of Towry	45	659 9 0
Kirkcudbrightshire	48	649 4 0
Cairnmore	40	625 0 0
Penhale Consols	37	572 11 6
Pantymwyn	38	536 18 0
Prospath	35	495 15 0
Lletten-het	34	480 0 0
Rhowydol	34	418 1 6
Dyffryn	31	421 13 6
Peak United	30	416 5 0
Wheat Constance	21	408 5 6
Callington	20	399 0 0
Penrynblas	27	370 2 3
Lord Hill	25	362 10 0
Darren	25	360 0 0
From Fawcett	28	339 10 0
Llanymyrran	21	310 16 0
Melin Llyn-y-Pair	23	307 1 0
Mendre	19	283 6 0
Kelwick	20	268 0 0
Carnarvon	15	231 1 0
Beddau	12	230 2 0
Beddau	19	195 0 0
Beddau	14	197 1 0
Beddau	12	165 6 0
Cwm Duff	11	154 0 0
Grogwinnion	11	151 0 0
Caegryn	12	148 16 0
Skidaw	8	113 8 0
From Issa	8	106 0 0
Llewellyn Hill	7	90 18 0
North Wheel Rose	6	93 8 0
Pengellyn	6	93 0 0
Ty-Maen	5	78 2 6
Gargre	4	70 10 0
North Wheel Trelawny	5	69 10 0

Total..... 8847 £144,006 6 7

This account exceeds that of last quarter by 1465 tons, and 13,554 7s. 1d. We begin to fancy that by continued perseverance on our part we shall at last arrive at something like a true account of these sales, notwithstanding the continued apathy displayed by the mining proprietors, who neglect to render us any sort of assistance.

THE TIN TRADE.

Sales of Black Tin during the quarter ending 30th June, 1853:—

Mines.	Tons c. q. lbs.	Amount.
Drake Walls	73 5 1 5	£5008 4 9
Lewis	74 9 3 16	4534 17 6
Great Polgoth	63 7 3 20	3790 6 5
Great Work	54 0 0 0	3119 9 9
Pobberro	53 5 0 0	2971 17 6
Boscundle	44 14 3 1	2754 8 2
Trellyn Consols	46 0 0 0	2432 17 5
Tincroft	35 18 0 0	2033 8 4
Providence Mines	32 0 0 0	1981 13 10
Wheat Reeth	33 3 3 21	1938 3 9
Botallack	29 0 0 0	1836 4 9
Yeroland Consols	5 5 0 0	1575 5 0
Wheat Sydney (Plymouth)	26 0 0 0	1412 10 0
Boscan	20 19 2 12	1295 11 2
West Towan	20 0 0 0	1242 10 0
Bosweddin and Wheat Castle	22 0 0 0	1135 1 8
Condurow	17 14 1 7	1057 12 5
Wheat Unity Consols	17 3 18	870 7 6
Charlestown United	15 0 0 0	857 15 0
East Margaret	11 17 1 24	656 17 1
Beddau Hill	10 0 0 0	636 12 6
Trellyn	14 16 1 0	811 0 7
Tremayne	11 0 0 0	677 18 2
Wheat Basset	11 0 0 0	611 1 10
West Ding Dong	8 8 0 0	519 17 6
Rix Hill	9 0 0 0	501 0 0
Great Wheel Baddern	6 19 1 12	412 0 5
Mill Pool	6 7 3 30	389 7 9
Birch Tor and Viller	5 0 0 0	318 15 0
East Kit Hill	5 10 0 0	313 10 0
Wheat Trebarrah	5 0 0 0	247 16 0
Sidney Godolphin	700 barrows	225 15 0
Wheat Robins	3 18 3 1	197 1 11
Wheat Jane	3 8 0 16	196 7 8
St. Michael Penkevil	3 0 2 22	174 18 0
Wheat Kitty	3 1 5 0	174 17 1
Wheat Montague	3 0 0 0	174 0 0
Wheat Eysa	2 15 1 5	156 11 5
Carnyorth	3 0 0 0	163 5 6
Calstock United	3 0 0 0	140 16 6
Stray Park	2 10 0 0	123 11 2
Wheat Augusta	1 12 3 19	108 12 0
Wheat Chiverton	2 0 0 0	105 8 0
Boscan	1 9 4 0	102 19 0
Prince Albert Consols	1 10 0 0	99 10 4
West Wheel Alfred	—	84 0 0
Union Tin	0 17 3 21	53 11 8
Hawkmor	0 16 3 16	44 2 1
Wheat Speedwell	0 9 0 0	21 10 6
Leeds and St. Aubyn	—	19 16 8
Wheat Harriett	0 9 0 0	19 10 0

Total..... 833 10 1 20 £30,580 11 5

This return shows a considerable falling off from the preceding quarter, not that the mines are producing less, but from the fact of our not being made acquainted with the sales from the following productive and profitable mines—viz., Wheat Owles, West Providence, St. Ives Consols, Levant, Balnoon, Sparre Consols, Carr Brea, Dolcoath, and United Mines.

Our columns are at all times open to communications from all such mines; and we regret that the agents and shareholders do not feel sufficient interest to ensure our receiving these particulars from them, although they frequently trouble us with complaints of omission after our quarterly returns have been published. All we have to say is, the fault lies with them, and not us, being our earnest desire to make our account as minutely correct as that of the Copper Ticketings both in Cornwall and Swansea.

ST. JUST.—We are happy to learn that as in this district many of the new schemes recently set on foot are dying a natural death, the men are returning to the old established mines, the scenes of their former labours, which alone is wanting to enhance the dividends in Botallack, Wheat Owles, and other standard mines in the neighbourhood, which have long suffered from this cause, as well as from the tide of emigration which has set in to such a considerable extent.

THE PROGRESS OF IRON MANUFACTURE.

[FROM A CORRESPONDENT.]

The vast importance, in a national point of view, of metallic manufactures, particularly those of iron, the number of great works in progress, and the improvements which have within the last few years been made in the various manipulations, may induce you at the present moment to lay before your readers a short synopsis of those most worthy attention. Dr. Ure has truly and pertinently remarked, that "the ores of iron are scattered over the crust of the earth, with a beneficent profusion proportioned to the utility of the metal; they are found in every latitude, in every mineral formation, under every zone, and disseminated in every soil. Iron accommodates itself to all our wants, desires, and even caprices; is equally serviceable in the arts and sciences, agriculture and war. It is a medicine of much virtue, and the only metal friendly to the human frame." The various processes through which crude iron ore must pass before it becomes a metal sufficiently malleable for practical operation is long and tedious; and the great object of the iron manufacturer is, therefore, to simplify and economise them as much as possible, always keeping in view the great importance of securing a uniformity in the quality of the metal. The columns of the *Mining Journal* have ever been devoted to the dissemination of information connected with the iron manufacture, and in now proceeding to notice some improvements which have more recently been introduced, I shall commence with,—

Mr. Joseph Jones, ironmaster, of Bilston, in his new refining and puddling furnaces, has sought to increase in the metal the important quality of malleability, and add to its facilities for receiving the impression from stamps, moulds, or dies, and thus in many articles of utility supersede cast metal. The broken pig is placed in the refinery, first slowly melted with charcoal or coke, and afterwards kept for some time at an elevated temperature, for the removal of a portion of the impurities before puddling. The refinery is attached to two puddling furnaces of peculiar construction, and as the metal is melted, it gradually runs off by inclined pipes, or ducts, into the two puddling furnaces, without any additional labour. The entire furnace is encased in massive iron plates, stayed together by tension rods across the top transversely, and the whole securely bolted together. To secure every portion of the furnace from the intense heat, a current of water is applied to a water space chamber, being a series of troughs which encircle the heated mass; the furnace doors and dampers have also water spaces, by which they partake of the cooling influence. Another improvement, also, consists in carrying a flue from the refinery furnace into the flues of a steam-boiler, so that the heat, otherwise wasted, is rendered available for generating steam. Furnaces on this construction have been in use at the Monkland Iron Company's Works in Scotland now upwards of a year, and from the great facility in working, and great economy, many enquiries have been made from other works, and they are likely to be brought into extensive operation.

The next improved process is an American one, that of Mr. Quillard, who, as long since as 1841, took out a patent for a process for manufacturing iron direct from the ore; which plan was not, however, fairly tested, from the aversion felt by capitalists to embark in that branch of commerce. The patentee has abided his time; he has recently succeeded in gaining the co-operation of Mr. Dupuy, agent for the Delaware and Hudson Canal Company, and works for a trial are now being constructed, 60 by 45 feet, which were expected to be in operation about the first week in the present month. The principle of Mr. Quillard is, that metallic iron does not melt at so low a heat as the earthy matter contained in the ore; consequently, if the ore, after being deoxidised in a calcining furnace at a red heat, is placed in a puddling furnace, and subjected to a low temperature, the earthy matter melts away from the metal, which is left in a pasty state, and may be balled and hammered up into the purest iron. The first object is to prevent the admixture of the carbonic acid from the fuel with the iron, as it takes place in the usual blast furnace, occasioning all the subsequent processes. He, therefore, passes the flame and heat round a sort of crucible in the furnace, without coming in contact with the ore and carbon contained in it, the latter of which completely deoxidises the former; from hence it is passed into the puddling furnace, producing a wrought-iron of first-rate quality, and, as stated by the patentee, at a very great saving in the cost of manufacture.

Dr. Joseph J. W. Watson and Mr. William Prosser have taken out a patent for an improved method of manufacturing steel and carburising iron, which consists in the use of electricity in producing carburisation in soft iron, to form steel and carburized iron; and in the employment of sulphate of manganese, the refuse of the chloride of lime stills, with carbonaceous matter and lime, to form steel, either with or without an electric current. The mode of applying the current, and in using the sulphate of manganese, appear from the claims to be as follows:—The current may be applied to a molten mass of cast-iron in the presence of carbonaceous matter; or to bars of soft iron embedded in charcoal in the ordinary converting troughs, such troughs, however, being made non-conductors of electricity. Bars for the formation of steel may be treated in the same manner. There is also a claim for the use of graphite and other carbons as electrodes for the conduction of the electric current.

Mr. Robert Taylerson, of Newcastle-upon-Tyne, has patented some improvements in iron ship-building, in which the main irons, ribs, or framing, are part diagonal in connection with part vertical, similar to a plan in the construction of railway bridges, as adopted by Mr. Robert Stephenson, instead of being all vertical, as at present. The plating and the butt-ends are also diagonal; the covering pieces or binding plates are rolled in opposite directions; the keel and keelson are on the principle of a tubular girder, and the beams are angular. Such arrangements have been made with a ship-builder and an iron manufacturer as will enable the patentee immediately to commence building on this principle iron vessels of the first class. Mr. Robert Bowman, of Newcastle-upon-Tyne, an iron shipbuilder of long standing, has reported most favourably of Mr. Taylerson's plan, particularly noticing that a vessel on this construction will stand in frame without either battens or plates, which those of common construction will not; and that the "hollow-girder keel" and "hollow keelson" possess the elements of strength, which do not exist in the old method of framing.

Among the recent proceedings in connection with the iron manufacture, we may notice a sumptuous entertainment given to about 50 of his friends by Isaac Bigland, Esq., of Elcheater Hill, near Shotley Bridge, Yorkshire, on the occasion of his leasing the extensive and valuable ironstone mines of the Marquis of Normanby, near Staithes, and the loading with ore a beautiful new vessel built expressly for the trade. The company inspected the cliffs between Staithes and Hinderwell, where Mr. Bigland pointed out the numerous and inexhaustible seams of ironstone of different qualities, with which the whole coast is girdled. The afternoon passed off with much cordiality, and the most sanguine expectations are entertained as to the results of this undertaking, not only amply rewarding the spirited enterprise of Mr. Bigland, but greatly enriching the whole district. The value of the ironstone districts of Yorkshire may in some degree be appreciated by the observations inserted in the *Mining Journal* of the 18th June, on the progress making in mining for ironstone in the Cleveland Hills, through which it is stated a railway is about being carried, thus to develop the entire locality.

We next proceed to some recent investigations by Dr. Karsten on the manufacture of steel, in which, from numerous experiments made at the cast-steel and file manufactory of M. Huth, at Geitbrück, near Hagen, in crucibles holding from 30 to 35 lbs. each, the results show, that in the selection of pig-iron for the manufacture of cast-steel, it is of importance to employ such as present perfectly lamellar structure, and not partly fibrous or compact. This is necessary, in order that the per centage of carbon in the charge may be calculated with accuracy, which cannot be done with fibrous or compact metal. The extremely high temperature which the fusion of bar-iron requires to produce a homogeneous steel, renders it necessary that it should be added to the charge in small fragments, about a cubic inch each; and perfectly infusible crucibles, not liable to crack, are a desideratum. The melted metal must be run off into cast-iron moulds as rapidly as possible, that the whole mass may cool uniformly, care being taken that none of the slags pass into the moulds, which solidifies in the midst of the steel, rendering the cast defective. The best plan is to skim the crucible while yet in the furnace. If allowed to cool slowly, cast-steel loses all coherence, and breaks down under the hammers. The cast bars, after cooling, must be freed from all adhering granules of metal, or the edges of the bars break in rolling. In working bar-steel a bright red heat must be employed, without a blast, in a well constructed reverberatory furnace; one fed with gas being the most preferable. Further experiments on this interesting subject have for the present been interrupted by the long illness and subsequent death of M.

late chairman and pursuer, to report to the next meeting, expected to take place in a few weeks.

A very long discussion then ensued, in which the CHAIRMAN, Mr. WEBB, Mr. VALLANCE, and others supported the committee on their proposal to postpone the payment of 1s. per share bonus out of the above premiums on shares; and Messrs. MOCATTA, ROBERTS, IRVING, and several proprietors, contended a distinct promise had been made; that many had taken up their shares directly with the consideration that this bonus would be declared at this annual meeting; and that its being withheld would tend greatly to depreciate the value of the property. On the other hand, it was shown that, when the expectation of the early payment of the bonus was held out, it was fully anticipated that the whole of the shares would have been disposed of at a premium, instead of which a sort of panic ensued, and 8000 were left on hand. The balance now in hand left the committee quite independent; but if the payment was insisted on, and any emergency should arise for immediate cash, there would be no alternative but to sell shares at a discount, which would most assuredly depreciate the value of the property. After an animated discussion, in which both parties tenaciously held to their opinions, the consideration of the subject was postponed until the next meeting, which would be convened immediately on the arrival of Mr. PHILCOX, one of the local directors, who is daily expected.

The meeting was then made special, for the purpose of altering the rules and regulations of the company, in consequence of gold having been found in the Echunga, to give the committee power to take immediate advantage of the circumstance, by either working themselves, or, what would be preferred, leasing the land to others. The several clauses, with the necessary alterations, having been read by Mr. VALLANCE, were carried unanimously, and thanks having been voted to the chairman, directors, and auditors, the meeting separated.

We express, without hesitation, our opinion that, under the circumstances, the course pursued by the directors, with respect to the bonus, is the most wise and the proper one. The amount at present realised would only enable them to pay a paltry shilling per share, a sum which, while of no moment to any holder, would probably, in case of a sudden demand for money from the colonies, cripple the exertions of the committee, and compel them to resort to ruinous measures. A call, as suggested by Mr. MOCATTA, is out of the question; nine out of ten of the scripholders would never respond to it, unless the shares were at a premium, which, under such circumstances, they never would be. The argument used on the other side, about unfulfilled promises and broken faith, is futile, as no distinct promise was ever made; and by a short delay, the directors, instead of paying a bonus of 5 per cent., will probably secure to the shareholders from 25 to 30 per cent., something really worth receiving, while it leaves them full funds for carrying on the undertaking with spirit.

In another column will be found an important communication from Mr. W. C. STEPHENS of the Royal Exchange, on the subject of the London Drainage Bill, introduced into Parliament during the session, with a view to afford means of effectually draining the metropolis; to preserve the Thames from the pollution at present passing, and to collect the contents of the sewers for agricultural purposes. The subject has already been investigated by a committee of the House of Commons, the evidence adduced before whom was of considerable interest, and vast importance; so much so was it considered by the chairman, that he moved that such evidence be printed, his object being, to the sense of the public might be taken previous to early legislation thereon; and on Wednesday, a petition was presented to the House, praying that the measure may be prosecuted this session; but the time is now short, and already so fully occupied, that we fear, without an immediate and energetic demonstration on the part of the metropolitan population, to whom it is of such incalculable importance, another year will be allowed to pass without any step being taken to arrest this crying evil. It will appear rather an anomalous proceeding on the part of the two Metropolitan Commissioners of Sewers; bodies appointed to adopt the best measures for promoting the public health and cleanliness; that they are the only opponents of the measure; they have no idea of relieving the Thames of its pollution, but absolutely contend that such filth is not injurious. It appears they intend (if they are allowed to adopt their own blighting views) to carry out the formation of extended inland sewers for many years, in connection with the present sewers; which will greatly increase the pollution of the Thames, and still further endanger the health of the metropolis.

POOR RATES IMPOSED IN IRELAND ON MINERAL GROUND.—We are glad to learn that the appeal of the Kenmare Mining Company against the infliction of poor rates has, after a third hearing, been determined by Mr. McDermott, the visiting magistrate at Kenmare, as invalid. The question arose as to whether an "abandoned" mine, on being resumed working, was absolved from the poor rates, or whether it should be considered a new mine, and thus exempted from such payment for seven years from the commencement of a resumption of operations. The question is of so much importance as will induce us next week to direct more particular attention to the subject. The result must be hailed as highly satisfactory, and form another feature in the advancement of the prosperity of Ireland—at least, so far as regards its mineral resources.

THE COPPER TRADE.—(From a Correspondent.)—Considerable attention has been drawn of late towards the remarkable fluctuations which have taken place in the price of the article of copper. During the last six months of 1852 the price remained steady at 102 1/2 10s. per ton for the best quality. On the 4th of January of the present year it advanced to 107 1/2 10s. per ton; on the 31st January to 126 1/2, and on the 18th of February to 135 1/2. These successive large and rapid advances were stated to be justified by the fact that the demand was continually in advance of the supply, the latter being diminished by the interruption to the production of copper in Australia, owing to the abstraction of labour both from the Burra Burra Mine and the smelting works, as well as by a reduced import from Cuba. The active state of business in France was also stated to have increased the demand from that quarter. Matters remained in this state until the 12th of April, when the trade was surprised with the announcement of a reduction of 18s. per ton, and on the 1st of June of a further reduction of 9 1/2 10s. per ton, bringing the price back to that of January. Thus we see in this article, within the short period of five months, an advance of 27 1/2 10s. per ton, and a decline of the same amount, without the intervention of any alteration of circumstances to account for these violent fluctuations. The price of copper is regulated by a body called, we believe, the Smelter's Association, and if this body proceeded always upon a fixed principle of endeavouring to regulate the price according to the state of the supply and demand, the public might not be any sufferers by this system. But it is stated that other impulses frequently regulate the movements of the body. Sometimes a refractory member of the trade, who kicks against the regulations of the smelting body, has to be coerced, and the price has to be regulated accordingly for this purpose. The last reduction is stated to have taken place because the Russian Government, having a considerable quantity of copper to dispose of, and certain parties having succeeded in contracting with the Russian Government for the purchase of it to the exclusion of the smelters, these parties were to be punished for their interference by an immediate reduction in the price. Whether this be the true solution of the matter or not, it is certain that the present system is a very unwholesome one, and ought to be put an end to. The consumer can never know what he is about in dealing in an article subject to such violent alternations in price, at the discretion of an arbitrary and irresponsible body. Copper is now so important an ingredient in certain branches of our manufactures, and in all our machinery, that the question is one of general interest.

COAL PROPERTY IN THE FOREST OF DEAN.—There is expected to be considerable competition for the purchase of the Arthur and Edward and Myrystock collieries, in the Forest of Dean, which will be sold by auction, at the Mart, on the 1st instant. This is not surprising, when it is taken into consideration that an enormous increased demand for the Hill Delf coal is daily taking place. The north part of the coal basin is at last being fully developed by means of railways. In addition to those already made, which will communicate direct with Ross and Monmouth, and will pass close to the pits—the nearest of any to those important places, we think the reports and cost of delivery at Gloucester, London, and intermediate places, we think the price stated is rather over than under what the coal could be delivered at; but, taking the price as stated in the reports, a large margin is left for profit. We are given to understand, from reliable authority, that 25,000,000 have been expended by the present proprietor in sinking shafts to prove the coal, erecting pumping and winding engines, workshops, &c.; and it is satisfactory to state that the vein of coal is proved to be from 4 to 5 ft. thick, and is of excellent quality, and makes a superior locomotive coke, for which there will no doubt be a large local consumption. The property is well known, and will no doubt realise its full value.

Stengell, the superintendent of the works, who assisted Dr. Karsten in these extensive manipulations.

Perhaps there never was a period in the history of the iron trade in which it presented such important features in all its phases. The Government returns for the present month show a considerable increase in our exports of iron and hardware, giving promise that the make for the current year will greatly exceed that of 1852, as given in the *Mining Journal* of 11th June, by Mr. Brithwaite Poole, who has published so much valuable information on statistics of British commerce, and which we now repeat:—

Districts.	In.	Out.	Total.	Pigs-iron.
Scotland.....	113	31	144	775,000
South Wales.....	135	27	162	635,000
Ditto Anthracite.....	12	23	35	31,000
South Staffordshire.....	127	32	159	725,000
North Staffordshire.....	17	4	21	90,000
North Wales.....	6	7	13	30,000
Shropshire.....	27	13	40	120,000
Durham.....	18	8	26	110,000
Northumberland.....	7	6	13	35,000
Yorkshire and Derbyshire.....	35	7	42	150,000
Total.....	497	138	635	2,701,000

There is little doubt but in the course of 15 years, or even sooner, this manufacture will be doubled in quantity. At the present moment there are 118 furnaces in blast in Scotland, producing at the rate of 800,000 tons per annum.

The usual quarterly meetings of ironmasters have commenced: the first was held at Walsall on Tuesday, and the second at Wolverhampton, on Wednesday. At the former the attendance was thin, and few orders given, but the other transactions generally were satisfactory; at the latter there was a larger attendance, and a reduction, resolved on at the preliminary meeting, had evidently a salutary effect, as orders were pouring in, particularly from America. The stock of pigs has decreased, and to a much greater extent in Scotland. Manufacturers' stocks are not large, and an opinion prevails that prices have reached their lowest figure. With respect to the Birmingham meeting, on Thursday, the same remarks will apply: it was numerously attended, and generally most satisfactory. It is evident the very minimum price of iron has been reached, for in addition to low stocks, high wages, and scarcity of ironstone, with a great demand, the present full value must, at least, be maintained. Export orders are daily increasing, and if the proportion for the current half-year is equal to the commencement, it is calculated that the exports for the year will reach 1,500,000 tons.

Altogether the meetings were highly satisfactory; the trade probably was never in a healthier state; the prospects for the ensuing quarter for manufactured iron are exceedingly good. Railway bars are wanted by ourselves to a great extent, for English, Canadian, and Indian lines, and a demand must shortly arise for Australia. For house and shipbuilding purposes, also, a very largely increased demand must arise. Whatever temporary reaction the trade may have been subjected to, it must of necessity partake of the general prosperity of the kingdom—a prosperity unparalleled as to its extent, or the firm basis upon which it evidently rests.

RAILROAD IRON.—We have given some astounding statements, but none the less true, in reference to the present and prospective consumption of this staple article. The figures, although based upon accurate estimates, seem at the first blush extravagantly exaggerated. One will hardly credit the fact that, to fulfil the orders for iron for railroads now in the course of construction in the United States and Europe will occupy all the rail making mills in the world, engaged in the manufacture of railroad iron, at the least, six years. Be it remembered, that the quantity of iron required amounts to 2,400,000 tons. This gives, estimating 100 tons to the mile, which is about the average of good rail, 24,000 miles of single track, enough to encircle the entire earth; as 12,000 double track, dividing it half single and half double track, and we have 18,000 miles, as roads, in progress of construction. The cost of forming this extent of road (half double track) will not be less, at the present rate of iron, with complete equipments of locomotives, cars, depots, than a sum total of \$900,000,000. The iron for the rails alone, as it is now selling, would amount to the respectable sum of \$120,000,000. But there is to be added to these figures, enormous as they are. There are several roads in our own country which were not taken into the account when these estimates were made, and late foreign intelligence states that subscriptions are opened for the northern railroad of Spain, to connect the French frontiers at Bayonne with Madrid, a distance of over 500 miles. Also, that a company is fully organized for the construction of a central Italian railroad, connecting Lyons with Rome and Venice, and Vienna with Leghorn and Genoa. Austria, Tuscany, and the Duchies of Modena and Parma, are parties to the enterprise. Independent of this, a railroad from Lyons to Turin, the charter of which has been granted. Add to all, the railroad to the Pacific, and we have the addition of 9000 miles of railroad to attach to the above figures, involving a total cost of some \$225,000,000, and \$25,000,000 for iron. Railroad companies, who have not yet made their contracts for iron, may feel some apprehension that they will not be able to provide themselves without great sacrifice of money and time. We cannot anticipate any material sacrifice except in the price of the article. We have no doubt the present high prices will be maintained, and for a time, in all probability, there may be an advance, but the law of supply and demand will soon create an equilibrium; and the fact of high prices will have the effect of multiplying rolling-mills and furnishing a ample supply. The furnaces of the northern and western states, the fires of which have so long been quenched, will again be lighted up, and the iron men will no longer complain of being forestalled by foreign iron-workers, because they are not sufficiently protected by a tariff. Far better than any tariff or Government aid whatever are high prices and ready sales.—*New York Mining Journal, May 27.*

AN AMERICAN IRON COMPANY.—We learn from New York, that the property belonging to the Providence Iron Company, has been disposed of by auction for \$10,000. The Providence Journal says:—"The original cost was about \$250,000. A more unfortunate enterprise has never been made in this city: the company was originally started for the making of iron wire, to be used in the manufacture of wood screws. Subsequently it went into the manufacture of railroad iron, and contracted with the Providence and Worcester Railroad to furnish the rails for that road at a price deemed to be a high one, in connection with a trumpet mouthpiece. The iron at a welding heat is taken direct from the furnace, and thrust into the mouth-piece, and the revolving wheels in connection with a mandril at once shapes and finishes the pipe with much greater rapidity and certainty than by any other method. It appears the patentee had granted a license to a Mr. Palmer at a royalty of 44.10s. per ton, who granted one to a Mr. Selby, formerly in partnership with plaintiff, but afterwards with defendant (Hodges), and they were sued as licensees. The defence was that the principle employed by defendant was different from plaintiff's, as they only used two of his; but a verdict was settled for plaintiff for \$2000, subject to a bill of exceptions, as follows:—1. If the defendant's machine was substantially the same as Prosser's, the plaintiff was entitled to the verdict.—2. That it was immaterial whether the machine used by the defendant was new or old at the date of Prosser's patent.—3. That the patent did not restrict the use of the trumpet-mouth for making 'screws' only.—4. That defendants were liable for making tubes by Prosser's machine."

PROSSER'S PATENT METAL TUBES.—A case (Brown v. Hodges), resulting out of an alleged infringement of a patent granted to Mr. Prosser, C.E., of Birmingham, was tried last week. Mr. Prosser's process, which was patented in 1840, consists of the use of four grooved wheels, in connection with a trumpet mouthpiece. The iron at a welding heat is taken direct from the furnace, and thrust into the mouth-piece, and the revolving wheels in connection with a mandril at once shapes and finishes the pipe with much greater rapidity and certainty than by any other method. It appears the patentee had granted a license to a Mr. Palmer at a royalty of 44.10s. per ton, who granted one to a Mr. Selby, formerly in partnership with plaintiff, but afterwards with defendant (Hodges), and they were sued as licensees. The defence was that the principle employed by defendant was different from plaintiff's, as they only used two of his; but a verdict was settled for plaintiff for \$2000, subject to a bill of exceptions, as follows:—1. If the defendant's machine was substantially the same as Prosser's, the plaintiff was entitled to the verdict.—2. That it was immaterial whether the machine used by the defendant was new or old at the date of Prosser's patent.—3. That the patent did not restrict the use of the trumpet-mouth for making 'screws' only.—4. That defendants were liable for making tubes by Prosser's machine."

IMPROVEMENTS IN THE MANUFACTURE OF STEEL.—The patent granted to the late Mr. J. M. Heath, for the employment of the carburet of manganese in any proportion for the conversion of iron into steel, and which has already been the subject of such extensive litigation, is likely to supply further food for the lawyers. Proceedings have recently commenced against some parties in Sheffield for infringement, and the long familiar case, Heath v. Unwin, is entered on the special jury paper for the Court of Queen's Bench, and another is set down for trial at the Liverpool Assizes in August. Steps are being taken to remove the venue of the latter to London, and it is probable neither will come on for trial before October.

TREVITHICK, THE INVENTOR OF THE TUBULAR BOILER.—It has been suggested that until some worthy tribute be raised by the British nation to Trevithick, the father of the locomotive engine, the proposed fountain near the Town Hall, Penzance, should be inscribed with his name, illustrated by his bust, and perhaps also a model of his first locomotive engine. It is well known that in 1804 his engine drew 10 tons of iron, at the rate of five miles an hour, and in 1805 it accomplished 12 miles within the hour. In his petition for remuneration to the House of Commons, which was never presented, it was stated that his boiler did not require half the materials, or occupy half the space of others; required so little fuel, and accidents from fire could not take place. That had it not been for this invention the great improvements in steam since effected could not have been realised, as the old boilers could not bear more than 6 lbs. per inch pressure above the atmosphere, while his worked commonly at 60 lbs. per inch, and was capable safely of bearing a pressure of 150 lbs. per inch.

COTTON ROPES FOR SHIPS.—There is a novelty about the *Sovereign* of the Seas that, doubtless, will be soon imitated by other vessels. The ropes which form the running rigging are of cotton, which we understand is not only capable of a tighter twist, but is not liable to become deteriorated by friction in the same degree as hempen cords. After they have been in use, too, for years, they can be sold for nearly as much as the original cost. These ropes are quite smooth, and run with great rapidity through the blocks. The sails also of this vessel are of cotton, two sets of cotton sails costing only the sum paid for one set of linen.—*Liverpool Times.*

HOLLOWAY'S OINTMENT AND PILLS HAVE CURED MANY PERSONS AFFLICTED WITH SCURVY, SCORBUTIC HUMORS, AND DISEASES OF THE SKIN.—SCURVY, RHEUMATISM, and other cutaneous disorders, are engendered by the impurity of the blood, and the only sure means to eradicate such complaints is to undergo a course of Holloway's Pills, and at the same time apply externally his invaluable Ointment. Cures performed by these wonderful medicines are daily attested, proving their astonishing efficacy in purifying the blood, strengthening the constitution, and re-establishing health. They are equally certain in the cure of cancerous sores, ulcerated wounds, and glandular swellings, and persons so afflicted should have recourse to these excellent medicines. Sold by all druggists, and at Prof. Holloway's establishment, 248, Strand, London.

SOUTH AUSTRALIA—ITS STATE AND PROSPECTS.

(FROM OUR OWN CORRESPONDENT.)

APRIL 11.—The departure to-day of the *Chusan* with the overland mail affords so acceptable an opportunity for writing to England, that I am loth to let her depart without giving you a few items of general intelligence from this colony, although nothing of consequence has as yet occurred in our social circumstances to break the terrible stagnation of all our industrial pursuits caused by the Victoria gold fields.

I announced in my last that the Assay Office, although definitely closed for the purposes of the Bullion Act, would probably be re-opened again under a new arrangement, for the purpose of affording to the public the advantage of having the gold, which still arrives here in considerable quantities, melted and assayed by the efficient staff of officers who conducted that department during the operation of the Bullion Act. The office was re-opened on the 28th ultimo, under the management of Dr. Davey, the gentleman next in rank to Mr. Babbage, who, I informed you, was appointed engineer to the Adelaide and Port Railway. The charge is only 1 per cent.; 3549 ozs. were deposited in the first week. The last escort from Mount Alexander only brought 15,000 ozs. of gold; the charge for sending gold to Adelaide by these escorts has been, also, considerably reduced; and as our banks have raised the price they are willing to give for gold in the same proportion as the price rose in Melbourne, there is no reason to suppose that our South Australian diggers will discontinue sending their gold here. With the exchange at 1 per cent. premium, the price of 22 carat gold has been fixed by the banks at 3*l*. 14*s*. 3*d*. an oz.; and as the gold of Victoria averages 23 carats, it follows that the price of gold dust in Adelaide is now 3*l*. 17*s*. 7*d*. an ounce, which is fully equal to the rates obtainable in Melbourne.

The large American ship, *Shackamaxon*, sailed from this on the 6th inst., bound for Swansea and Liverpool, having on board 800 tons of ore for the Patent Copper Company, besides wool, &c., and 14,107 ounces of gold. She makes upwards of 5000*l*. freight and passage money home, which, with the large amount made coming out with emigrants (between 10,000*l*. and 12,000*l*.), ought to be highly satisfactory to Messrs. M'Henry, of New York, the owners. The shipment of gold per this ship makes up a total of 172,200 ounces of gold shipped from Adelaide since 1st January.

The Australian Royal Mail Company's steamer *Adelaide*, with the December mail, has not yet arrived,—what an unfortunate company this is! not a ship has been able to make the passage even in "sailing" time. The *Melbourne* steamer, after all her mishaps in Europe, broke her screw before she finally got back to Adelaide on her return trip; and we have since heard that she did not reach Swan River on the 28th—nine days! when the passage ought to be made in six days! The *London Times* will probably have a few more slashing articles about this ship, and the Admiralty talent for building vessels that will not sail. But now we have to do with a steamer built by the first builders in England, who had *carte blanche* in every respect in building her, and, if report speaks true, have certainly turned out their yards as magnificent a steamer as money can build; yet still there has been mishap upon mishap, and four calendar months after the date of her reaching Plymouth she is not yet arrived. You can form no idea of the terrible inconvenience this causes to the merchants and other individuals expecting letters from England. The London Post-office keep all letters for these steamers, and the annoyance of being without advices must be felt to be properly understood. The mails by the *Melbourne* were so carelessly stowed on board, that I know from undoubted authority that to this day there are in the Melbourne Post-office bundles of letters by that steamer which, from being thoroughly soaked in sea-water, are turned into balls of *papier maché*, utterly defying any attempt at separation, or decyphering of the addresses! To suppose that with the increasing importance of these colonies such a state of things is to be allowed to endure much longer, would be an insult to this enlightened age.

The directors of the Burra Burra Mining Company have, for some time past, advertised in the local and Melbourne papers that they intend resuming underground operations on the 28th inst., and guarantee tributors to earn 40*s*. per week; from what I am able to judge of the labour market here, as well as that of the adjoining colony, where I have lately been, I must express my conviction that they will fail in this very laudable desire to resume the important underground works. Although it is not to be denied that the produce of gold is not so great in Victoria as it was six months ago, and that the reduced amount raised is distributed amongst an increased number of men, there is still an overwhelming amount of inducement held out for able-bodied, intelligent, active, and hard working men, such as our Cornish miners are, to prevent them leaving Victoria. The very fact of the gold lying so deep (I know of holes being sunk 75 ft. before any gold was found) makes the Cornishman peculiarly adapted for its pursuit. What to another workman would be most laborious and even dangerous work, to him is but a repetition of the labour of his life, with this immense advantage, that he is his own master while he works, and that as long as an ounce of gold is left in the ground the chances are greatly in his favour that he will be able to get at it by driving and sinking, when other less experienced men would be deterred from prosecuting the search. To expect to induce these men to leave the profitable work they are engaged upon, to come back to the Burra Burra Mine to earn a minimum of 2*l*. a week, is hopeless; but independent of this search for gold, this class of workmen are eagerly sought for in Victoria for all kinds of labour connected with bridge-building, road-making, and a variety of other occupations, because they are known to be industrious and steady workmen, and are sure of receiving the highest wages going; the advertisement of the Burra Burra Company, although it speaks of a minimum of 2*l*. a week, says nothing of how long they will pay this price to the miners; and a feeling has got abroad amongst them that after they were once again resettled at the mine, this advantage would be withdrawn by the directors: it would certainly have been better if the advertisement had fixed a stated time during which this arrangement was to continue in force. The annual general meeting of this company is to be held on the 20th inst. I will take the first opportunity to forward to you the particulars.

A magnificent public testimonial was presented last week to George Tinline, Esq., the acting manager of the South Australian Banking Company of this place: it consisted of a sum of 2500*l*. in cash, besides 210*l*. for the purchase of a service of plate. The inscription, which is to be engraved on the silver salver, will state that this testimonial is intended as a grateful memorial of the important services rendered by him during the financial crisis immediately preceding and subsequent to the passing of the Bullion Act, and in testimony of the appreciation of his most considerate, judicious, and successful efforts to maintain unimpaired, throughout that period, public and private credit. Nearly 200 of the leading colonists were present at the dinner at which this testimonial was presented; and not the least interesting part of the proceeding was the eloquent speech made by Mr. George Elder, the chairman, in proposing Mr. Tinline's health, and presenting this testimonial. What a comment this event suggests on the conduct of the Bank of Australasia with reference to the Bullion Act, through whose disgraceful repudiation of this measure the temporary difficulties of Mr. Tinline's position were greatly aggravated, besides seriously injuring his health from the anxiety and additional labour it caused him.

We are curious to ascertain what recognition the directors in England of the South Australian Bank will make of Mr. Tinline's services to that bank during last year's crisis; I confess I have no faith myself in the generosity or appreciation of services usually evinced by English companies, but it would seem impossible that, after such a demonstration in Mr. Tinline's favour out here, the directors can avoid imitating the example, if they have not already done so of their own accord, and the customers of the bank in Adelaide having subscribed 2710*l*. Surely the proprietors in England, who have made so large a profit on last year's transactions, cannot, in common decency, vote a less sum than that themselves.

The land sales by Government continue satisfactory; since the 1st of January a total of 55,180 acres of Crown land has been disposed of, realising 79,271*l*. 6*s*. or an average of 1*l*. 8*s*. 10*d*. per acre. The exports, the produce of the colony for the quarter ending 25th March, amounted to 278,799*l*. exclusive of gold or bullion; the amount for the corresponding period of 1852 was 241,909*l*. The Savings Bank has reduced the rate of interest on sums lent on mortgage from 10*l*. to 8*l*. per cent.; the deposits increase enormously, whilst opportunities for investment are rare in these times of total stagnation of industrial pursuits. In Sydney, the banks are now discounting at 5 per cent. per annum, and the bank interest must be reduced here before long, as 8 per cent. is out of proportion to the rate charged in the other colonies.

The beautiful steamer, *Cleopatra*, 1200 tons, belonging to Messrs. M'Kean, McLarty, and Co., Liverpool, which has for the last two months been employed running between Adelaide, Melbourne, and Sydney, was to have

returned to England next month, but the passenger traffic is so great that the ship is making a large profit now, and it is to remain in the colonial trade till June, when it will return to England, via Cape Horn, Rio, and Madeira. It is in every respect a most efficient and beautiful ship; the accommodations are very perfect and comfortable, and with such a commander as Capt. Cadell, there is no possible opening for complaint on the part of passengers. It is a great pity that so fine a ship cannot be permanently kept in the inter-colonial passenger trade.

The steamer built by Captain Cadell in Sydney, and intended for the Murray navigation, was launched when Capt. Cadell was last in Sydney; it is named the *Lady Augusta*, in compliment to Lady Young, wife of our Governor, and we hope to hear of its safe arrival here in two or three weeks more. Capt. Cadell will then give up the command of the *Cleopatra* for one trip, and after taking the *Lady Augusta* up the Murray, proceed to England in command of the former fine ship in June.

THE LATE CAPTAIN HENRY FRANCIS.

Captain Henry Francis died at Goldsithney, on the 8th instant, aged 69 years. The deceased was well known in the West of Cornwall. Half a century ago he was taught mining and mining engineering under his uncle, Capt. J. Davey, of Gwinnear, and at that period Capt. Davey was connected with Capt. Trevithick in carrying out those experiments on the Cornish steam-engine which has led to its present unparalleled utility. Upwards of 40 years ago he took the management of Wheal Neptune, and made for the proprietors profits to the extent of 120,000*l*. He afterwards managed West Wheal Alfred, the lode of which mine ran under Hayle River, and offered much difficulty, in consequence of the great influx of salt water. This was nearly 30 years ago, and the steam-engines of that time were of a very inferior construction to those of the present day. Shortly after this Capt. Grose put up his celebrated engines at Wheal Hope and Wheal Towan, raising the duty from 30,000,000 to 80,000,000, and reducing the expenditure in proportion of from 80 to 30. From this period mining has been comparatively easy and inexpensive. West Wheal Alfred was stopped with a loss of 18,000*l*. He afterwards worked successfully Wheal Caroline, near Goldsithney, Wheal Elizabeth, in St. Erth, and Wheal Virgin, near Relubbus; these mines did not afford large profits to the proprietors, but were a source of great benefit to the working miner and the country. In two mines, Wheal Charles and West Godolphin, he was unsuccessful. The last act of his life was to open Wheal Guskus, which bids fair to rival the best mines of the district. He held the mineral agency of the Hawkins family, in the western part of Cornwall, from a very long period back up to the time of his death, and enjoyed the confidence of all connected with that eminent family in a high degree. He was a man of great energy, uncompromising integrity, and perfect candour. Through men of his stamp, all that is excellent in mining has been effected; and with the aid of such spirit, mining is evidently destined to reach a high position among the varied sources of industry which tend to elevate this island. He has taken with him the sympathy of all good men who had the benefit of his acquaintance. May he rest in peace!

THE EAGLEBROOK MINE, IN WALES (formerly called the Welsh Potosi).—During the reign of Charles I. there was a mine open in Cardiganshire, called from its great richness the Welsh Potosi. It is recorded of the owner of this mine that he raised a regiment of soldiers to support King Charles, and that he equipped the king's army at his sole expense, and lent to the king 150,000*l*. This was an extraordinary feat, for King Charles, and probably never since the civil wars, was returned to his mine in the spring of this year, two miners discovered some hidden adits near to the supposed site of the Welsh Potosi. Two of these adits were cleared out, and the vein was exposed to view. A great practical miner, who first inspected it, says—"The mouths of the adits were all covered over with earth, and overgrown with grass a month ago. I went in with the miners, and I never saw such a lode in my life. There were solid courses of ore left 15 ins. in width, the whole lode being from 8 to 9 ft. wide. I have opened mines in Cardiganshire, which have paid 30*l*. a-year profit upon 7000*l*. capital; but I never saw so much ore in any mine before. I think the share 30 at 250*l*. each, will pay more than that sum per year, as the ore can be broken for a few shillings per ton." Subsequently, this person goes on to say—"The vein is seen in two shallow adits, about 30 fathoms apart; and there is evidence of the ore ground extending lengthways for many hundreds of fathoms. A deeper adit is now being cleared, which will be available in a few weeks and if this shows the same quantity and quality of ore, large fortunes must be realised. The capital required to work the mine will be trifling, not more than 1000*l*. as it is already open, and the ore is so good. The discovery of ore is most remarkable, and the mine may take, but it will necessarily be a very large one. There is a shipping place 14 miles from the mine. The mine seems to have been purposely closed up with rocks, as if concealed for the purpose of being worked in after times."

The royalty or dues are 1-14th, the mine being held from Pryce Loveden, Esq. The mining operations will, from the favourable nature of the ground, be carried on by means of adits and water-wheels, both safe and inexpensive. There is a large lode of copper ore in addition to the lead. This ore, assayed by Mr. R. Musket, yielded 15*l*. per ton of ore; this was a mere approximation, and the same sample of ore, assayed by a London chemist, gave at the rate of 20*l*. 8*s*. of silver per ton of ore. This latter result will, however, require confirmation, as the produce in silver is so very large. The price of the copper ore at the present standard for copper would be 14*l*. 15*s*. per ton, independently of the silver it contains. The price of the lead ore, which yields about 80 per cent. of lead, and 8 ozs. of silver to the ton, will be about 14*l*. The dues, therefore, upon the ores will not exceed 20*s*. per ton, the cost of raising 10*s*. per ton, and, if 50*s*. in addition be allowed per ton for other expenses, in working a cargo of 14 miles, the ore will realise a net profit of 10*l*. per ton. If only 20 tons of ore weekly shall be raised, the mine will return a capital of 19,000*l*. per annum; but under spirited direction, there seems no doubt that this quantity may be quadrupled, and the profits increased in a like proportion.

Some parties who lately visited the mine concur in the testimony of the original discoverers of this property, that there can be little doubt of the identity of Welsh Potosi and Eaglebrook, from the fact that in the isolated mountain district in which it is situated, there is a road from some ancient cottages about 1½ mile from the mine, which is obliterated by time, but still traceable from these cottages to the mouth of the adit; and that this road leads to them and the mine, and is a great advantage. The present company are restoring the road for their operations of sorting machinery to the mine, and sending the ore to Aberystwyth.

THE CAMEL SLATE QUARRIES.—These quarries, which are in the parish of St. Breock, Cornwall, midway between the towns of Wadebridge and Padstow, hold out more than ordinary inducement for investment of capital, inasmuch as they are most advantageously situated on the banks of the river, where vessels of large size can approach the quays attached thereto; and access to the quarries is also afforded by turnpike-roads between the various towns in the district and the Bodmin and Wadebridge Railway—a main station of which is within 1½ mile of the Bodmin branch of the Cornwall Railway, now in course of formation, will afford easy transit to all the principal towns of Cornwall and Devon. The quarries have been partially worked at a profit for some years past; but now their value will be fully ascertained—it being determined, by parties resident in the neighbourhood, properly to work and explore the same; and from the circumstance of the quarries producing slate of large size and superior quality, possessing so many local advantages, and from the greatly-increased demand for slate, now used for such a variety of purposes, no doubt whatever exists but that the enterprise will prove most valuable and remunerative. On reference to the advertisement, it will be seen that the gentlemen forming the committee of management—all of whom are of the highest respectability, and a committee guarantee that the works will be carried on in a skillful and economical manner; and that this must result in a speedy return of the capital invested, and a lasting and profitable concern. A great portion of the shares are, we understand, allotted.

BURTON IRON WORKS.—At an entertainment on Saturday last, the workmen in the employ of Messrs. Thornes and Warham heartily cheered the health of the proprietors; as also "Success to the Burton Iron Works, and the Town and Trade of Burton," connecting therewith the name of Mr. John Potts, the foreman. Mr. Potts replied, alluding to the great improvements in progress in the town and at the railway station—the latter of which was due to their respected foreman, Mr. Bass. He urged the workmen to be economical, and lay by something for a rainy day; and believed all who were willing could obtain work with fair wages.

FAILURE OF A MINING AGENT.—At the Court of Bankruptcy, on Tuesday, a meeting was held before Mr. Commissioner Fombaque, for the proof of debts and choice of assignees under the fiat issued against J. R. Vivian, of Chesham, in the Durnford-street, Plymouth, dealer in mining shares. Mr. James, of the firm of Brown, James, and Co., of Abchurch-lane, proved upon seven bills of exchange drawn by Richard Wallis Dore upon and accepted by the bankrupt for exchange drawn by Mark Sherman, of Wellsborough, Northampton, proved upon two bills by the same drawer for 354*l*. The Commercial Steam Navigation Company also proved for 164*l*. 5*s*. The total amount proved was 2249*l*. 14*s*. 3*d*. Mr. W. M. Chambers, of Gresham-street, wine merchant, was appointed the creditors' assignee.

The petition, under the Joint Stock Companies' Winding-up Act, for the dissolution of the "Adelaide City and Port Railway Company," is to be heard on the 29th instant.

TAVISTOCK UNITED MINES.—SALE OF MINE MATERIALS, TWO STEAM-ENGINES, 40-H. WATER-WHEEL, PITWORK, &c.

MR. F. A. DAVIS WILL OFFER FOR SALE, BY AUCTION, on Tuesday, the 19th of July, 1853, at Twelve o'clock at noon, at the TAVISTOCK UNITED MINES, situate at Whitechurch, about one mile from Tavistock, the whole of the valuable MACHINERY and MATERIALS of the said Mines, comprising a 30-in. cylinder STEAM PUMPING-ENGINE, 7 ft. stroke in shaft, and 5 in. cylinder, with two boilers, 5 tons each (one new), an extra piston and piston-rod (new); also, a 20-in. cylinder DOUBLE-ACTING ROBEY STEAM-ENGINE, with boiler, about 7 tons; both of which engines and fittings are in excellent working order. Also, a powerful WATER-WHEEL, 40 ft. diameter, 4 ft. breast (almost new); 1 set 12 head stamps with iron axle, &c.; 1 set of ditto, with wood axle. 18 9-in. pumps; 20 8-in. ditto; 10 7-in. ditto; 6 6-in. ditto; 5 5-in. ditto; several working barrels; 2 24-pieces; 6 door-pieces; 2 10-ft. 7-in. and 7-in. plungers, with cases, stuffing boxes, and glands; balance and other tools, with models and brasses; superior capstan with shears and sheaves; 90 fms. capstan rope; several whins and tackle ropes; 30 flat-rod pulleys; 300 fms. of flat rope in good condition; pulley frames and stays; about 10 tons 2½-in. tramroad iron; 2½ tons saddles; 6 tram wheels; 420 fms. of 4-in. and 80 fms. of 6-in. wood air-pipes; 80 fms. bucket-roads with buckets; shaft rig; about 2 tons of hammered iron (new); gad steel; 60 fms. 6-in. wood rods; several set off's; hammered iron plates and caps; machine and waste kibble; new horse whin with poppet head, pulley, &c.; lots of old brasses, a quantity of new Norway timber; several cog-wheels; kettles, stands, and weights; 2 air-fanning machines; 1 double-acting pumping ditto; 15 new shaft-rolls; 21 new stamps caps; brass bell and stand; 2 powerful lifting cranes and stands; bolts, burs, yokes, staples, and glands; shaft ladders; whin and other chain; 36 and 24-in. smiths' bellows; smiths and miners' tools in great variety; wood sheds; casing and dividing timber; superior miners' dial and stand, &c. (by Wilton); powder; safety fuse; fire-brick; a complete house, furniture and fittings, with numerous other useful articles.

Prior to the sale of the materials, the WHEAL ANDERSON and the WHEAL ANH SETTS, which compose the TAVISTOCK UNITED MINES, will be OFFERED TO PUBLIC COMPETITION; they are respectively held for absolute terms, of which 18 years in the former and 15 in the latter, are unexpired, under 1-15th shares. These sets, which are very extensive, abound with promising lodes of tin and copper; from that in Wheal Anderson more than £3000 worth of rich tin ore was raised in a comparatively short time.

N.B.—The above materials are of first-rate quality, and well worthy the attention of mine agents, iron founders, and dealers generally. Catalogue will be ready, and may be obtained, at the offices of the Auctioneer, in Tavistock, on and after the 15th of July, by personal application, or by letter pre-paid. Refreshments on the table at Eleven o'clock.—Auction-rooms, West-street, Tavistock, June 27, 1853.

10-IN. CYLINDER STEAM-ENGINE FOR SALE.

MR. F. A. DAVIS WILL SELL, BY AUCTION, on Tuesday, 19th July, 1853, at Twelve o'clock at noon, at the TAVISTOCK UNITED MINES, in the parish of Whitechurch, near Tavistock, a horizontal 10-in. cylinder ROTARY CONDENSING STEAM-ENGINE, and gear work attached, for stamping and pumping; and an excellent 9-horse boiler, about 3 tons, capable of generating steam for a much larger cylinder, also sweep-rod and shaft bob—the whole in excellent condition. The engine is situate at East Wheal Bedford Mine, on West Down, in the said parish of Whitechurch; and may be viewed by application to Capt. James Carpenter, at Ankerston, near the Tavistock United Mines, or to the County Fire and Provident Life Office, West-street, Tavistock, July 13, 1853.

CHESHIRE.—TO CAPITALISTS.

SALE OF VALUABLE AND MOST EXTENSIVE COAL-FIELD AND FREEHOLD LAND, AT THE CLARENDON ROOMS, LIVERPOOL.

MR. LLOYD WILL SELL, BY AUCTION, at the Clarendon Rooms, South John-street, Liverpool, on Wednesday, the 20th day of July inst., at Two o'clock in the afternoon, subject to conditions then to be produced, the ENTIRETY of most valuable BEDS OF COAL, lying and being under upwards of 20 acres of land. Also, the UNDIVIDED TWO-FIFTH PARTS OF THE MANOR, or reputed Manor, of LITTLE NESTON, and the CHIEF RENTS and WASTES thereof, and of the BEDS and SEAMS OF COAL and other MINERALS (not being royal minerals) within or under the same; the remaining three-fifths being the property of the Earl of Saresbury. And the 20 acres of FREEHOLD LAND, under which the entirety of the coals, estimated to be rich in fire-clay and ironstone; together with the MACHINE-HOUSE, DWELLING, &c.

This colliery is most eligibly situate on the banks of the estuary of the River Mersey, within a short distance of Parkgate, Great and Little Neston, in the county of Chester, and affords great facility for the transit of coal by sea to Liverpool, Birkenhead, and the English, Irish, and Welsh coasts. It is now partially worked, but a moderate outlay of capital, judiciously laid out, will render it most profitably productive. The entirety of the coal under the freehold land is unwrought, and contains seams of 7, 6, 5, and 2 ft. respectively.

The manorial coal-field possesses the same seams of coal, and deserves the special attention of capitalists, from its immense extent, and the quality is held in higher estimation than any other coal by consumers in Birkenhead and the locality. P.S. Mr. Isaac Jackson, the resident manager, will show the property; and reference may be made to W. Thomas, Esq., mining engineer, Bryn Merlyn, Bagillt, near Holywell.—Descriptive particulars may be had of Messrs. Nichol and Smyth, solicitors, 15, Carey-street; John Williams, Esq., solicitor, 5, Farnival's Inn, London; Messrs. Potts and Brown, solicitors, Chester; at the Exchange Rooms, Manchester and Liverpool; and at the office of the auctioneer, Park-gate, Ruthin.

SADDLEWORTH.—25-HORSE CONDENSING BEAM ENGINE, WOOLLEN, AND OTHER MACHINERY, &c.

MR. WHEATLEY KIRK IS INSTRUCTED TO SELL, BY AUCTION, on Wednesday, the 20th July, 1853, at Twelve o'clock at noon, on the premises of the New and Old Mills, at Upper Mill in Saddleworth, the following valuable MACHINERY and EFFECTS:—viz. One 25-horse CONDENSING BEAM ENGINE (by Peel, Williams, and Co.), bore of cylinder 26 in., and stroke 5 ft.; 4 pigs, complete; brushing and Lewis machines; steam finishing mill, with scay; 5 ft. 9 in. fulling stocks; stone cylinders; weighing machine; also a quantity of other miscellaneous effects, sugar-mill, hand-truck, skips and cranes, ladders, wheel-barrow, planks, ropes, a quantity of window-frames, strapping, wire-screws, large cast metal wheels, cast and wrought metal, and other valuable property and effects. Full particulars in catalogue, which may be had at the offices of the auctioneer, 24, Finsbury-street, Manchester; or by post on receipt of four stamps.

BY ORDER OF THE UNDERWRITERS AT LLOYD'S.

MOST IMPORTANT TO COTTON, WOOLLEN, AND LINEN SPINNERS, MANUFACTURERS, ENGINEERS, MACHINISTS, CONTRACTORS, AND OTHERS.—SALVAGE FROM THE "ROYAL WILLIAM," LOST ON HER OUTWARD VOYAGE FROM HULL TO ST. PETERSBURGH.

MR. WHEATLEY KIRK HAS THE HONOUR TO ANNOUNCE that he has been retained to prepare for SALE, BY AUCTION, early in the month of AUGUST, at the RAILWAY DOCK, at HULL, the most valuable MACHINERY from the vessel above-named, the whole of which is quite NEW, and has been removed in the most perfect state of efficiency. The leading articles comprise (by Hibbert and Platt) woollen scribbles; ditto, with Calvert's patent burring apparatus; woollen carding engines, with spooling frames; cotton carding engines, 40 inches on the wire; grinding machines, 30-in. cast-iron rolls; wool cleaning machine (Calvert's patent); woollen hand mules (by Lenth and Sons); saws (by Spear and Jackson); 12 patent hand and power looms, for fusians and linens (by Mark, Smith, and others); hand Jacquard looms, for weaving ornamental linen fabrics; improved cross-cutting and perpetual machines for shearing woollen cloth (by Firth); four and five colour printing machines, with copper rollers to each; sewing machines, and dandy roll for paper machine (by Mather, Platt, and Co., Salford); wrought-iron hatters for calendar rolls, with handle. Among the engineering and mechanics' tools (by Whitworth, Smith, Beacock, and Co., Salford and others) may be enumerated, slide-lathe beds, with restulators, for screw-cutting, 27 and 28 feet long, with 12-inch centres and 16-foot beds; powerful punching and shearing machines, weighing 7 and 3 tons respectively; plate-bending machine, 10 feet wide; self-acting planing machine, will plane 12 feet long, 4 feet wide, and 4 feet high; slotting radial drilling and shaping machines; ponderous travelling crane, up to 30 tons; together with a large assemblage of miscellaneous machinery, tools, utensils, &c., &c.

Full particulars in catalogue, at 1s. each, may be had 14 days before the sale, at the *Mining Journal*, Fleet-street, London; or at the offices of the auctioneer, 24, Finsbury-street, Manchester; or by post, on receipt of four extra postage stamps. Foreigners will find full descriptive advertisements in the French, Hamburg, Vienna, and St. Petersburg papers, &c.

MINING MATERIALS FOR SALE.

MR. JENNINGS WILL SELL, BY AUCTION, AT WHEAL PENHALE MINE, near Wadebridge, on Thursday, the 21st inst., at Two o'clock in the afternoon, the following materials, consisting of a STEAM-ENGINE, 20-in. cylinder, with a boiler about 9 tons; balance-bob; crusher and wheel; a very good horse-whin; shears and pulleys; lots of timber; roofs of houses; with a variety of other articles.—Further particulars may be had by applying to H. F. Stephens, Rose Cottage, Wadebridge.

GLAMORGANSHIRE.—VALUABLE FREEHOLD ESTATE, extending over about 720 acres, with RICH VEINS OF COAL AND IRON, together with numerous PUBLIC-HOUSES AND DWELLING-HOUSES, at CAERPHILLY, producing at the present moderate rentals, about £1150 per annum.

MESSEURS, NORTON, HOGGART, AND TRIST have received instructions to OFFER FOR SALE, at the Mart, on Friday, July 29, at Twelve, in one lot, the ENERGLYN ESTATE, situate in the parish of Eglwyslan, Caerphilly, about eight miles from the rapidly-improving town and port of Cardiff, 12 from Newport, and 16 from Merthyr Tydfil, in the county of Glamorgan. This exceedingly valuable property extends over about 720 acres of arable, meadow, pasture, and wood land, intersected by a beautiful stream of water, bounded in part by the River Roney, and is divided into farms, with suitable farm-houses and farm-buildings. The mansion of Energllyn, partly in ruins, is situate upon an eminence sloping to the south, well sheltered and timbered, commanding a very extensive prospect, having a good view of the fine old ruins of Caerphilly, which adjoins the estate, and the site is admirably adapted for the erection of another residence; there is also a grist mill and a tucking mill; and in Caerphilly numerous dwelling houses, cottages, and public-houses. As an agricultural estate the lands are capable of very considerable improvement, and many of the meadows close to the town are valuable for a considerable portion of the year. The present income, at low and moderate rentals, is about £1150 per annum. Independent of the value of Energllyn estate as an agricultural property, it is situate in the very midst of the rich coal field of South Wales, and valuable veins of coal and iron extend under the whole; the coal, which is of the best quality, has already been developed, and both it and the minerals are capable of being worked to great advantage; the railway from the Romney and Eufe works to Newport is within half a mile, and convenient access to it may be easily obtained; the station of Tafr-y-well on the Taff Vale Railway is within four miles, and the proposed extension line of the Newport and Pontypool Railway to Quaker's-yard will be within a short distance. These minerals are of a very important consideration to a purchaser, particularly having reference to the immense improvement which is fast going on through the whole of South Wales from its rapid and increasing railway communication. The estate may be viewed on application to Mr. Evan Evans, Caerphilly, where particulars may be had.—Particulars may also be had of Edward Priest, Esq., solicitor, Cardiff; Messrs. Whitcombe, Hoggart, and Wemyss, solicitors, Gloucester; Messrs. Dean and Goodrich, solicitors, 61, Lincoln's Inn-fields; Richard Hall, Esq., land agent and surveyor, 2, Finsbury-street; at the Mart; and of Messrs. Norton, Hoggart, and Trist, 62, Old Broad-street, Royal Exchange.

FOREST OF DEAN, GLOUCESTERSHIRE.—The ARTHUR AND EDWARD AND MIERY STOCK COLLIERIES, NEAR LYDBROOK, celebrated for their excellent produce and the extent of their resources, with the advantage of RAILWAY COMMUNICATION nearly to the PIT'S MOUTH.

MR. ROBINS IS INSTRUCTED TO OFFER TO PUBLIC COMPETITION, at the Auction Mart, London, on Thursday, 21st inst., at Twelve, in two lots, the IMPORTANT FREEHOLD COLLIERIES, near Lydbrook, in the township of West Dean, Gloucestershire, known as

THE ARTHUR AND EDWARD AND MIERY STOCK,

consisting of 530 acres, and computed by competent judges to contain 3,833,280 TONS OF COAL.

of a quality fully equal, if not superior, to the best coals obtained from this wonderful district, comprising "The Hill Delf Vein, or Seam," which has gained a reputation of the highest character for its hardy texture and bituminous qualities, being found most suitable for household purposes, the manufacture of gas, iron, and conversion to coke. The colliery has been opened, and two shafts or pits sunk down to the coal, a distance of 85 yards. There are two superior steam-engines erected for the use of the colliery, one a condensed water-engine, with counterweight, of 90-horse power, with 24-inch pumps, for raising the water, which performs the duty with great power. The sinking of the colliery, therefore, can be commenced immediately. The other, a winding engine of 14-horse power, capable of drawing to the surface upwards of 100 TONS OF COAL EVERY 24 HOURS.

The buildings are most substantial, and fully adequate to contain a winding engine of greater power, should the working of the colliery extend, as it easily might, to 300 TONS EVERY 24 HOURS.

The underground workings have been formed by strong arched roads and headings; in places a second shaft or pit, sunk about 60 yards, at the top of the Great Bon's Hill, called Bennett's Pit, which might readily be worked to yield 100 tons per day. The importance of railway communication almost to the pit's mouth, leading to every district of England, and the facility of shipping from the Ports of Bullo Pill and Lydney, on the Severn, open a vast field for supply, and is sufficient to authorise the certainty of

AN ENORMOUS SALE FOR THE COAL,

which will be most importantly augmented by the contemplated Port at Brimsill, Government having purchased the Hagley Estate with the intention of making that port, and a locomotive line thereto, whilst the contiguity to the Lydbrook Iron and Tin Plate Works, where many thousands of tons are consumed annually, must not be lost sight of. It is a well-known fact that the only collieries working the Hill Delf Vein to any extent will very soon be worked out; and that no coals from this vein can thereafter be obtained till fresh pits shall have been opened. Mr. Robins with confidence recommends this property to the notice of enterprising capitalists, as the means of leading to immense pecuniary gain.

Particulars, containing much valuable information from experienced surveyors, regarding the working of the mine, may now be had of Mr. Masterson, on the premises (where samples of the coal and coke may be seen); and of Mr. H. Williams, engineer, 61, Moorgate-street; Mr. P. Robinson, Hill House, Little Dean, Gloucestershire; of Messrs. Turner and Deane, solicitors, Colchester; Messrs. Humphrey and Marshall, solicitors, 12, Gray's-inn, London; at the Auction Mart; and at Mr. Robins's offices, Covent-garden.

N.B.—One third of the purchase money may remain on mortgage of the collieries and plant for a term of years, if required, at five per cent.

For information with reference to quantities or to view plans of the awards, apply to the Gavelier's Office in Colford.

BRIGHAM, DEVON.—TO BE SOLD IN FEE, BY PRIVATE

CONTRACT, about 7 acres of ENCLOSED LAND, containing a very large and rich deposit of lode of IRON ORE, yielding 53 per cent. of good pig-iron; also a large vein of RED OXIDE, worth from 40 to 45 per ton; as also some CLAY, &c., proved to be well adapted for pigments.

This property is situate within a quarter of a mile from the harbour of Brigham, where freight can be always obtained at a very moderate rate. There is every appearance of there being a very large body of ore on the land, which can be raised at a trifling expense, as it runs rich near the surface. The average cost of raising the ore, carrying it to the shipping port, putting it on shipboard, and harbour-dues, would not exceed 3s. 6d. per ton. As it is impossible to judge of the several advantages or value of the property without being on the spot, the proprietor can with great confidence recommend any company, or individual, wishing to invest a small capital in a first-rate iron mine, either to come themselves, or send an agent thoroughly conversant with mining, to inspect the same.—For further particulars, apply to Mr. Gillard, solicitor, Brigham.

N.B. Several cargoes are now on the surface of the land for inspection.

TO IRONMASTERS, IRON ORE DEALERS, AND OTHERS.

Notice is hereby given, that the GOVERNORS of the CORPORATION OF THE SONS OF THE CLERGY are prepared to receive TENDERS for the IRON ORE on their estate at STONE NINE CHURCHES, in the county of Northampton. The ore is very abundant, of fine quality, and lies within a few feet from the surface. Also, several parcels of coal, and is most conveniently situated for carriage, a portion skirting the London and North-Western Railway, about one mile south of the Weedon Station. Easy access to the Grand Junction Canal may also be obtained by arrangement with other parties.

Tenders must be sent in for the consideration of the Governors on or before Friday, the 22nd day of July next, and may be made for any portions not less than 20 acres of the ore. The Governors do not undertake to accept the highest offer. Plans of the estate, and further particulars, may be obtained by application to 2, Bloomsbury-place, London, June 28, 1853. CHAS. JOHN BAKER, Registrar.

FIRST-CLASS STEAM-COAL COLLIERY.—TO BE SOLD, BY PRIVATE CONTRACT, ONE-HALF OR THE WHOLE OF THE BARRINGTON

COLLIERY, situate in the parish of Bedlington, county of Northumberland. This colliery is lately won and in full operation, producing steam-coal of the best quality, well known by the name of Longridge's West Hartley.—For particulars, apply to F. D. Lambert, Esq., 32, St. Mary-at-Hill, London; Jons Hewison, Esq., solicitor, castle-upon-Tyne; or, A. Story, Esq., solicitor, Durham.

TO BE SOLD, A STEAM ENGINE, of 60-horse power, with boiler, &c., all in perfect state of repair. Also, about 100 yards of 10-in. PIPES, with T-bob, &c.—Enquire of Mr. Barnett, Three Crowns Inn, Shildon, Co. Durham, near Birmingham.

TO BE LET, upon such terms as may be agreed upon, the MINES and MINERALS existing upon about 4000 acres, situated in the barony of West Garry, county of Cork. Grey sulphuret of copper, in clay-slate, has been found; also yellow pyrites of copper, and several lodes of quartz, all on the surface. Working of a very ancient date exist on this property.—Apply to Henry W. O'Donnell, Monkstown, near Cork.—July 1, 1853.

WANTED, A SITUATION AS VIEWER, OR MINE AGENT, at a COLLIERY, by a person who has had many years practical experience in that line in some of the best collieries in the county of Durham. The advertiser will furnish references, testimonials, &c., on application to "X," *Mining Journal* office, 26, Fleet-street, London.

TO PARENTS AND GUARDIANS.—WANTED, IN THE OFFICE of a CIVIL AND MINING ENGINEER of good practice, a PUPIL, who will have every advantage, as well as the use of an extensive library. A premium will be expected.—Address by letter, pre-paid, to "A. B.," J. Clark, stationer, 13, Moorgate-street, City, London.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the proprietors of this association will be HELD at the office of the company, 26, Austin Friars, on Tuesday, the 26th day of July inst., at One o'clock precisely.

By order of the Court of Directors, WM. LECKIE, Secy.

26, Austin Friars, July 6, 1853.

COPIAPO MINING COMPANY.—Notice is hereby given, that the

ANNUAL MEETING of shareholders will be HELD at the offices of the company, No. 2, New Broad-street, on Friday, the 29th inst., at Two o'clock precisely.

By order of the Directors, EDWARD J. COLE, Secy.

Office, 2, New Broad-street, London, July 8, 1853.

MEXICAN AND SOUTH AMERICAN COMPANY.—The

SIXTEENTH DIVIDEND OF SEVEN SHILLINGS AND SIXPENCE per share, on the shares of this company, will be PAID on and after the 20th inst., between the hours of Eleven and Three.

Forms for claiming the dividend may be obtained by the shareholders, on application at the office, on or after the 11th inst. GEORGE COPPARD, Secy.

17, Gracechurch-street, July 4, 1853.

ROYAL SANTIAGO MINING COMPANY.—The directors of this

company hereby give notice, that they have this day made a CALL upon the shareholders of ONE POUND per share, to be paid to the company's bankers on or before the 17th day of September, 1853. By the terms of the agreement constituting the company, all shares of those proprietors who do not pay the said call of £1 per share within 30 days after the 17th of September will be absolutely forfeited.

The form to make the payment will be delivered upon application at the office, and the certificates must be lodged at the same time to have the payment endorsed thereon.—38, Broad-street-buildings, July 13, 1853.

A RUNDELL COPPER MINES, NEAR ASHBURTON, DEVON.

NOTICE OF THE ORIGIN, POSITION, AND PROSPECTS OF THIS MINING PROPERTY, by J. WHITTON ARNOLD, Esq., is JUST PUBLISHED, and may be obtained at Mr. Edgingham Wilson's, Royal Exchange-buildings, London, or ordered through any bookseller.

CLEW BAY COPPER AND SULPHUR MINING COMPANY.

The directors, in pursuance of the resolution passed at the General Meeting of shareholders, held on Monday, June 27th, hereby give notice, that they have this day made the THIRD CALL of ONE SHILLING per share upon all the shares of the second issue, and that the same must be PAID to purser, at the offices of the company, on or before Saturday, 30th July inst.

CHARLES LYALL, Purser.

14, King William-street, Strand, July 6, 1853.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE

MEDAL WAS AWARDED TO THE MANUFACTURERS OF THE ORIGINAL SAFETY FUSE, BICKFORD, SMITH, AND DAVEY, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate. Address.—BICKFORD, SMITH, AND DAVEY, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO., PEN-

HALLICK, near REDRUTH, CORNWALL, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe. Messrs. BRUNTON & CO. are at all times PREPARED TO EXHIBIT UNLIMITED ORDERS FOR SUPPLYING FUSE direct from their own MANUFACTORY, upon warrant that it will prove equal to, if not better, than any to be procured elsewhere.

WHEAL ZION MINES COMPANY.—Notice is hereby given, that unless the CALLS IN ARREAR ON UNREGISTERED SHARES, with interest thereon, be PAID within TWENTY-ONE DAYS from the date of this notice (June 28, 1853), the same will be absolutely FORFEITED; and it is requested that the holders of unregistered shares do forthwith sign the Call-book.

The following resolution was also unanimously passed:—

That the shares upon which the calls now remain unpaid be, and the same are hereby declared, forfeited; nevertheless, if the calls in arrear, with interest at the rate of 5 per cent. per annum, be paid within 21 days from the date of this meeting, such shares upon which the calls and interest thereon shall be so paid shall be continued in force as heretofore. The interest chargeable upon calls in arrear to be computed from the date when they respectively became due. PETER STAINSBY, Salvador House, July 6, 1853.

GREY MARE LEAD AND IRON MINES, ST. WINNOW, CORNWALL.

Held under grant from the Right Hon. A. B. Grenville, for 21 years, at 1-15th dues (5d. per ton for iron ore).

In 3000 shares, at 2s. 6d. per share.

PURSER.—Mr. Thomas Sargent, Liskeard.

This piece of mineral ground, situate within 2½ miles of the port of Lostwithiel, is fully half a mile square, and within half a mile of the Cornwall Railway, thereby offering great facilities for exporting minerals and receiving materials. Many well-known lodes cross the sett at right angles from north to south. Some of these lodes are known to contain lead ore, and one large iron course, contains some of the richest iron ores known to exist in this county; the produce by assays being from 45 to 70 per cent. for iron. This lode is 4 feet wide, surrounded by a beautiful soft white and red kyllas, quite congenial for iron ores, and is a parallel one to the celebrated iron course near Lostwithiel, the produce of which far exceeds all others yet known in this county.

It is thought this lode in Grey Mare will produce a large quantity of much richer iron than the celebrated iron course near Lostwithiel, and that if the discovery is spiritedly operated on, large and profitable returns might immediately be made.

The above capital is quite sufficient to do all things required to make profitable returns of iron. The lead speculation is good, inasmuch as there have been rich courses of lead discovered to the south on the same lodes, in Broom's Park.

The lessees have decided on disposing of 2500 shares, at 2s. 6d. per share, to be paid on allotment; 1s. per share to be paid to the present proprietors for work done, purchase of the sett, and preliminary expenses. Iron being in great demand, immediate operations are advisable. Any party taking a large number of shares may have their names inserted in the deed as lessees.

All the machinery required for some time is a horse whin, pulleys, rope, and a few loads of timber. The cost will not exceed £40.

Applications for 2500 of the shares to be made to Mr. Richard Hawke, Liskeard, or to Mr. Thomas Sargent, the purser.

NORTH CORNWALL UNITED MINING COMPANY

Consisting of 20,000 shares.

Conducted on the "COST-BOOK PRINCIPLE,"—10,000 only to be issued to the public at 21 each.

COMMITTEE OF MANAGEMENT.

R. G. ALSTON, Esq., 45, Harley-street, Cavendish-square.

R. P. BATTEN, Esq., 1, Crown-court, Old Broad-street.

E. C. BOURNE, Esq., 244, Regent-street.

B. CLAPHAM, Esq., The Terrace, Old Kent-road.

W. T. GOOCH, Esq., 3, Bartholomew-lane.

J. SHERWIN, Esq., Imperial Foundry, Finsbury.

(With power to add to their number.)

BANKERS.—Messrs. Rogers, Olding, and Co., Clement's-lane, London.

SOLICITORS.—P. G. Grell, Esq., 42, Lombard-street.

BROKERS.—Messrs. Trevellick and Co., 6, Hanover-square; and 12, St. Michael's-alley.

OFFICES.—52, Old Broad-street.

These mines are situated in the parishes of Mawgan and St. Ewel, in the county of Cornwall, and embrace an extensive run on the course of numerous lodes, comprising an area of 590 acres. Considerable work has been done, and outlay incurred, in bringing the works to their present condition, the advantages of which will be experienced by the present company, both in saving of time and expenditure; for which and for the leases, the present proprietors have agreed to accept payment in shares. Six lodes have already been opened upon, containing more or less lead in each, specimens of which may be seen at the offices of the company, and one of them presents the certainty of thousands of tons of ore (lead, copper, and sulphur) from workings at the present level, which is driven in at high water mark on the north coast of Cornwall, about midway between East Wheal Rose and Pentire Glaze, the two richest lead mines in the county.

In most mining undertakings partial and restrained workings, arising from a limited capital at starting, have caused great disappointment and loss; it has, therefore, been determined that these valuable mines shall not be subject to these disadvantages, but that an ample capital shall be provided at starting to carry out and effect the necessary openings, ventilation, and erect the requisite machinery, with as much dispatch as possible, for economically realising larger and permanent returns.

It has been previously notified that one of the lodes is so far opened upon as to ensure the certainty of several thousand tons of ore being wrought, even were the mine not worked beneath its present depth (sea level), but with the erection of machinery there is no doubt of greater quantities of a superior quality in depth; and without any disposition to over rate expectation, the nature and character of the property, the great extent of the run and the number of lodes, their unusual favourable position, the fact that produce can be forthwith raised from three of them, that from Wheal Rose, many tons of lead ore lie broken at the surface of the mine in rocks from 30 to 300 lbs. each, justify the assertion that when the mines are fully opened not only great but very unusual profits may be confidently anticipated.

Prospectuses, with detailed reports from experienced mining captains, and forms of application for shares, may be had on application to the secretary, at the offices of the company, where specimens of the ores may be seen.

ANGARRACK CONSOLS COPPER AND LEAD MINES, IN THE PARISH OF GWINEAR, IN THE COUNTY OF CORNWALL.

In 16,000 shares of £1 each.—Deposit 10s. per share.

On the "COST-BOOK SYSTEM"—No deed to be signed, and no liability beyond the shares held.

The lodes in this Mine are a continuation of the Alfred Consols and Great Wheal Alfred; the latter of which has returned upwards of £1,000,000 sterling.

COMMITTEE OF MANAGEMENT.

BENJAMIN JONES, Esq., Bond Court House, Watbrook.

MURRAY ANDERSON, Esq., Tollymore-park.

WILLIAM LELAND, Esq., 76, King William-street.

C. B. WILSON, Esq., Farnival's Inn.

MICHAEL JERDEIN, Esq., 16, Old Broad-street.

THOMAS CHAUNTELLER, Esq., Tollymore-park.

NOTICE OF DIVIDEND.—BANK OF DEPOSIT.

NATIONAL ASSURANCE AND INVESTMENT ASSOCIATION.
The WARRANTS for the HALF-YEARLY INTEREST, at the rate of FIVE PER CENT. per annum, on the Investment Stock of this Association, to the 30th June, are READY FOR DELIVERY, and PAYABLE daily between the hours of Eleven and Three o'clock. Depositors residing at a distance from London will, on application, have the dividend warrants, together with the proper receipts, forwarded by post; the amount will then be paid to the order of the Association, country bankers, or in any other way to suit the convenience of investors; so that the dividends may in all cases be received without difficulty or delay.

PETER MORRISON, Managing Director,
7, St. Martin's-place, Trafalgar-square, London, July 9, 1853.

Parties desirous of investing money, are requested to examine the plan of this Association, by which a high rate of interest may be obtained, combined with perfect security.—Prospectuses and full information may be obtained at the chief office; at the branch offices and agencies throughout the kingdom; or will be sent, post free, on application.

SMOKE NOISANCE SUBDUED, AND TWENTY PER CENT. OF FUEL SAVED IN LAND AND MARINE BOILERS of all forms, by the PATENT SMOKELESS FURNACES.

TO MR. JOHN LEE STEVENS.
Garrick Hill, City, July 6, 1853.

Sir,—In reply to your enquiries respecting the working of your patent smokeless furnaces, we beg to say that we are perfectly satisfied with those fitted up on our premises, Garrick Hill, in March, and also on our premises in Little Trinity-lane, in April; and we have no doubt of equally favourable results from the use of the invention in our new boiler, now making for us by Messrs. Horton and Son.

Your furnaces have effectually subdued the inconvenience from smoke previously existing; and, judging from our last adaptation of your system, after about three months' experience, we may safely estimate the saving on bituminous coal at 20 per cent. With your introduction, we shall be happy to permit inspection of our furnaces in working hours.

Information respecting LICENSES to MANUFACTURE or USE the PATENT SMOKELESS FURNACES is given by Mr. John Lee Stevens, the patentee, at the offices, 63, King William-street, City, London, where drawings and further testimonials, &c., may be seen, and references obtained to several highly respectable firms in London and elsewhere, upon whose premises the Patent Smokeless Furnaces are in daily operation.

IMPROVED STEAM HAMMERS.—Mr. ISHAM BAGGS is now prepared to SUPPLY ironmasters, engineers, manufacturers, and miners, with STEAM HAMMERS and STAMPS of the most IMPROVED CONSTRUCTION, for forging and hammering iron and other metals, driving piles, and stamping and crushing gold quartz, rathas, and minerals of every description. By the introduction of a principle recently patented by himself, in conjunction with Mr. Frederick Bramwell, C.E., no less than FIFTY PER CENT. of the STEAM now used is saved, while the blow struck is very much harder than in the engines now in use.

The NEW STEAM-STAMPS, for crushing ores, have been adopted by many of the leading companies, and they are now at work in various parts of North and South America, Australia, and England. They are eminently adapted for panning, as well as crushing to fine powder, and they effect an enormous saving in superheated manual labour. A four-horse steam-stamp complete, with all the latest improvements, £140 (royalty included), for cash; a twenty-horse engine ditto, £500, and other sizes at proportionate rates. Contracts to any extent undertaken.

For further particulars, apply to Mr. Isham Baggs, Mining Journal office, No. 26, Fleet-street, London.

EXTRACTION OF GOLD AND SILVER FROM THEIR ORES.
The NEW RAPID AMALGAMATOR (BAGGS'S PATENT) requires ONLY HALF the usual amount of MERCURY, and effects an enormous SAVING OF TIME in the process of AMALGAMATION. The NEW MERCURIAL SEPARATOR, secured under the same patent, effects a complete separation of the mercury from the refuse quartz, after the process of amalgamation is complete, in the space of a FEW SECONDS, instead of requiring, as at present, a tedious operation of some TWO HOURS.

In these machines, improved mechanical arrangements are aided by the most powerful chemical affinity, and from the principles introduced, it is next to impossible for a particle of gold to escape. The three following companies have already adopted these important improvements:—The Anglo-Californian Gold Mining Company, the Alliance Californian Gold Mining Company, and the Anglo-Australian Gold Mining Company.

For terms of license, and other particulars, apply to Mr. Isham Baggs, Mining Journal office, 26, Fleet-street.

THE NEW STEAM STAMPS, FOR CRUSHING GOLD QUARTZ AND METALLIC ORES.—(BAGGS'S PATENT).
These powerful MACHINES are now TO BE HAD at a SHORT NOTICE, and of any number of horse-power, from four to twenty.—All communications to be addressed to Mr. ISHAM BAGGS, at the office of the Mining Journal, 26, Fleet-street.

A four-horse Steam stamp, complete, £130, royalty included, for cash, and other sizes at proportionate rates.

The following Testimonial of the power and efficacy of these engines is from the manager of one of the smelting establishments in South Wales, where steam stamps, of moderate power, under this patent, have been for some time in operation:—

TO ISHAM BAGGS, ESQ., LONDON.

DEAR SIR,—In reply to your letter of inquiry about the action of your Patent Stamping Machine, I beg to say that I have now had it fully at work for two months; the quantity of coarse metal it will crush with ease is about 20 tons in 10 hours—about two-thirds is crushed fine, the remainder would require to be stamped a second time, to reduce it to the same fineness. The steam used is very little, and the crushing force very great; large lumps of the metal (which is very hard) are immediately broken down—when I say large, I mean lumps as big as ordinary paving stones. I am now putting up the second machine which you sent me, and have no doubt it will give (as the first has already done) entire satisfaction. I am quite convinced that the principle is excellent, and far superior to any other mode of crushing.

I am, yours, &c.,
ALFRED TRUMAN.

Spitts Copper Works, Llanelli, July 23, 1852.

The patent stamps may be used with atmospheric pressure, through the medium of a water-wheel or other prime mover. The application is extremely simple, very powerful, and where a motive-force is ready at hand, the machines cost less than when steam is employed.

NOTICE.—TO GOLD COMPANIES, AND THE MINING WORLD GENERALLY.—THE NEW STEAM STAMPS.—One of these powerful ENGINES HAS JUST BEEN ERECTED, and IS NOW SET TO WORK at Messrs. MEDWIN and HALL'S, Engineers and Portable Engine Makers, No. 92, BLACKFRIARS ROAD, where it may be seen in operation daily, and its powers subjected to any required test. These stamps, after the most careful inspection, have already been adopted by the following companies:—

THE ENGLISH AND AUSTRALIAN COPPER COMPANY.
THE ANGO-CALIFORNIAN GOLD MINING COMPANY.
THE ALLIANCE GOLD MINING COMPANY.
THE ANGO-AUSTRALIAN GOLD MINING COMPANY.
THE MEXICAN AND SOUTH-AMERICAN MINING COMPANY.
THE ST. JOHN DEL REY (Gold, Brazil).
THE LINAIRE LEAD MINING ASSOCIATION (Spain).
THE LONDON AND CALIFORNIA GOLD QUARTZ CRUSHING COMPANY.

And they are about being adopted by several other companies and private individuals, who have carefully tested the results of their crushing powers, and submitted their capabilities to the most severe tests. In proof of the utility of these engines, it may be observed, that the saving in manual labour is such, that they will effect to one company alone (the St. John del Rey) will amount to many thousands pounds sterling per annum.—For cards to view the engine at Messrs. Medwin and Hall's, apply, by letter, to Mr. Isham Baggs, Mining Journal office, 26, Fleet-street, London, where any further particulars may be obtained on application.

THE WASHINGTON CHEMICAL COMPANY. NEWCASTLE-ON-TYNE.

PATTINSON'S OXICHLORIDE OF LEAD.
The WASHINGTON CHEMICAL COMPANY having, during the last year, ESTABLISHED a MANUFACTORY of PATTINSON'S OXICHLORIDE OF LEAD on a large scale, and being able to supply it with regularity, and to execute ORDERS without DELAY, now proceed to bring this new and valuable preparation of lead before their friends and the public, quite sure that it will not, in the present age, be condemned because it is new, and that if judged by its merits, must make its way, and finally take its place as one of the important manufactures of this country.

PATTINSON'S OXICHLORIDE OF LEAD is a chemical combination of one equivalent of chloride of lead and one equivalent of oxide of lead; it being well known that common white lead is a chemical combination of one equivalent of oxide of lead and one equivalent (or thereabouts) of carbonic acid, constituting what is called in chemical language, carbonate of lead. Now, there is no reason to conclude that carbonate of lead is the only compound of lead valuable as a paint, and still less that it should be the best compound of lead for that purpose. In point of fact it is not so, for the newly-discovered oxichloride in most, if not in all respects, is far superior; its colour is brilliantly white, and in a number of cases it has been tried against the best white lead that could be obtained, and after a period of upwards of two years, it has been found to retain its white colour considerably better than the lead against which it was tried. But the chief and by far the most important advantage it possesses is its remarkable and very decided superiority of body, by which term the power of covering surface well and extensively is understood among painters. The attention of the discoverer was at a very early period drawn to this circumstance, and since that time the Washington Chemical Company have had abundant opportunities of placing its superiority in this important particular beyond all doubt. They have themselves performed a number of experiments, and have also caused a number of experiments to be performed, in the large way, by various practical men, to ascertain accurately its covering power as compared with the best white lead, and they now state the proportions to be as 60 to 100—that is, 60 lbs. of oxichloride paint will cover as much surface as 100 lbs. of the best white lead, the saving of cost being in the same proportion; besides this, the coating is thicker and more protective, both in and out of doors, as the oxichloride dries into a hard tenacious layer, more like an enamel than paint. In using the oxichloride, no difference in the materials with which it is mixed is required, oil and turpentine being employed as usual both for work technically called flattening and for work intended to be varnished. For the use of painters and leather dressers, the oxichloride is found to be peculiarly suitable. The Washington Chemical Company strongly recommend this newly-discovered substance to the notice of consumers, both on account of its economy and its intrinsic good qualities as a paint.

AGENTS.
LONDON.—Messrs. Richard Cooke, 7, St. Saviour's-street.
LIVERPOOL.—Messrs. Blundell, Spence, and Co., 9, Upper Thames-street.
MANCHESTER.—Messrs. Johnson and McGowan.
LEEDS.—Messrs. T. and E. G. Jenson.
SUNDERLAND.—Mr. John Young.
DEVONSHIRE AND CORNWALL.—Mr. Richd. Penrose, Tavistock & Plymouth.
EDINBURGH AND EAST COAST OF SCOTLAND.—Mr. William Bailey, jun., Green-side-place, Edinburgh.
GLASGOW AND WEST COAST OF SCOTLAND.—Mr. John Hinchay, Glasgow.
DUBLIN AND SOUTH OF IRELAND.—Mr. P. Linskey, No. 91 Middle Abbey-street, Dublin.
BELFAST.—Messrs. William Stevenson, jun., and Co.

DOVER LOCAL BOARD OF HEALTH.

IMPROVEMENT WORKS.
The Board hereby give notice, that they are prepared to receive TENDERS from parties who may be willing to undertake any of the following CONTRACTS, viz.:—
CONTRACT No. 6.—For the SUPPLY of a certain quantity of SMALL IRON CASTINGS, including JUNCTION PIECES, TRAPS, GULLY GRATINGS, VENTILATING CAPS, SIDE ENTRANCE DOORS, &c.
CONTRACT No. 7.—For the SUPPLY of a certain quantity of HYDRANTS.
CONTRACT No. 8.—For the SUPPLY of a certain quantity of SLUICE-VALVES.
Particulars may be obtained on or after the 25th day of July inst., at the offices of Messrs. Hammett and Lister, engineers to the local board, 4, Trafalgar-square, London.—Tenders must be sent in to the office of the undersigned, at Dover, on or before the 8th day of August next.
By order of the Board,
THOMAS BAKER BASS, Town-Clerk.
Dated July 13, 1853.

TOURS IN IRELAND.**DUBLIN GREAT INDUSTRIAL EXHIBITION.**

IRISH TOURIST TICKETS (available for a month) are NOW ISSUED at the following stations:—
London (Euston Station) £5 10 0
Edinburgh, Glasgow, Hull, Bristol, Carlisle, &c. 6 0 0
Oxford, Worcester, Cheltenham, Gloucester, &c. 6 15 0
Birmingham, Rugby, Loughborough, Coventry, Lincoln, &c. 5 0 0
Manchester, Watlington, Stoke, Macclesfield, &c. 4 0 0
Liverpool, Chester, &c. 4 0 0
They enable the holders to proceed to Chester, Bangor, Dublin, Cork, and the Lakes of Killarney, and back again to the station at which the ticket was taken.
The holder of each Irish Tourist Ticket is entitled to have issued to him at the office, 53, Westland-row, Dublin, at very reduced rates, tickets for a tour in the county Wicklow, in Kenmare and Glengarriff, up the River Shannon; for the journey from Dublin to Belfast, for the excursion to the Giant's Causeway, and from Dublin to Galway for the tour through Connemara.
Every purchaser of a ticket is presented, gratis, with a copy of the Illustrated Irish Tourist's Hand-Book, compiled solely for these tours.
The fullest and most accurate information afforded at the Chester and Holyhead Company's Office, 52, Westland-row, Dublin. See also Bradshaw's Guide, p. 123.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.**NEW ARRANGEMENTS, AND REDUCED FARES AND FREIGHTS.****DEPARTURES OUTWARDS.**

INDIA AND CHINA, via EGYPT.—For Aden, Ceylon, Madras, Calcutta, Penang, Singapore, and Hong Kong, on the 4th and 20th of every month from Southampton; and on the 10th and 26th from Marseilles.

AUSTRALIA via SINGAPORE.—For Adelaide, Port Phillip, and Sydney (touching at Batavia), on the 8th September, and 4th of every alternate month thereafter from Southampton; and on the 10th September, and 10th of every alternate month thereafter from Marseilles.

MALTA AND EGYPT.—On the 4th and 20th of every month from Southampton; and on the 10th and 26th from Marseilles.

MALTA AND CONSTANTINOPLE.—On the 27th of every month from Southampton.

AMERICA AND PORTUGAL.—For Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, from Southampton on the 7th, 14th, and 21st of every month.

CALCUTTA AND CHINA.—Vessels of the Company ply occasionally (generally once a month) between Calcutta, Penang, Singapore, Hong Kong, and Shanghai.

N.B.—The rates of passage money and freight on the India and China lines have been considerably reduced, and may be had upon application at the Company's offices, 122, Leadenhall-street, London, and Oriental-place, Southampton.

AUSTRALIA.—THE PORT OF SOUTHAMPTON COMPANY'S

REGULAR LINE OF PACKET SHIPS SAIL MONTHLY FOR ADELAIDE, MELBOURNE, AND SYDNEY. These splendid ships are built upon the most approved lines, noted for their fast sailing, and are fitted and ventilated upon new and scientific principles. Only one class of passengers taken, at the uniform rate of Twenty-five Guineas, which includes a liberal table, medicines, and medical attendance. Children half-price; infants free. To families of more than three children, an allowance of 10 per cent. in the passage-money will be made. Passengers and their baggage conveyed over any portion of the South-Western Railway to the ship's side at Southampton free of any expense.

Apply to Grindlay and Co., 121, Bishopsgate-street, and 8, St. Martin's-place, Charing-cross; Bennett and Aspinwall, 77, Cornhill; and at the company's offices, 5, Canute-road, Southampton.

IRON SHIP BUILDING.

The great impetus given to Iron Ship Building since the IMPORTANT DISCOVERY of a SUCCESSFUL ANTIDOTE AGAINST FOULING IN LONG SEA VOYAGES, has induced the inventors, Messrs. PEACOCK and BUCHAN, of SOUTHAMPTON, to lay before the public a FEW ADDITIONAL TESTIMONIALS as to its unrivalled success during the last twelve months, feeling it unnecessary to publish all the satisfactory letters and documents received from time to time from highly respectable parties, in the form of an advertisement, but copies of which can be seen on application at the offices of their agents in all the principal ports of the United Kingdom and the Continent; and the inventors beg to call the attention of IRON SHIP BUILDERS, the DIRECTORS of GREAT STEAM COMPANIES, and SHIPOWNERS in general, to the subject, in order that the REMEDY so long existing against iron ships may be ESTABLISHED.

The return of the *Queen of the South, Harbinger, and Lady Jocelyn*, from an Indian voyage, PERFECTLY CLEAN, has solved a great problem in the application of iron for the manufacture of ships intended for long sea voyages.—Vide Bourne's *Treatise on the Screw Propeller*, Appendix, pp. xxxiv, xxxv, and xxxvi.

An iron ship receiving two coats before leaving England, which can be applied within three days, in the manner of ordinary painting, and taking with her a small quantity hermetically sealed in an iron cask, for re-touching between wind and water on arrival out, and occasionally whilst coaling; where it may be rubbed off by lighters, &c., will MAKE THE VOYAGE TO INDIA, AUSTRALIA, OR CALIFORNIA, WITHOUT THE NECESSITY OF DOCKING IN THE COUNTRY; and this composition not having the LEAST PARTICLE OF COPPER IN IT, no galvanic action, to the prejudice of the iron, can possibly take place.

Messrs. Peacock and Buchan would also beg to call the attention of shipowners to the value of their No. 1 Composition, for single bottoms and sheathing, either of COPPER, YELLOW METAL, or ZINC, particularly since the late extraordinary rise in the price of copper.

In applying the No. 1, it is important that the SURFACE SHOULD BE DRY, and that the sheets of copper or yellow metal should be RUBBED DOWN WITH SPIRITS OF TURPENTINE TO REMOVE THE FELTICE OF ATMOSPHERIC OXIDATION, and PREVENT THE WARMING OFF of the composition.

The cost of the composition is about the same as that of red lead, taking the difference of quantities required for coating with one and the other.

The following are amongst other testimonials recently received:—

IRON SHIPS.

"Messrs. PEACOCK and BUCHAN, Southampton.—Having from time to time, during a period of twelve months, made a series of trials of your composition for preventing oxidation and foulness on the bottoms of iron ships, upon several of the iron ships belonging to this Company, in COMPETITION WITH ALL OTHER KNOWN COMPOSITIONS brought out for this object, I am enabled to state that yours has proved decidedly the best, and the Company have, therefore, adopted it. We were in the habit of docking our Cape steamers every voyage to clean and re-coat, but since using your composition the ships can now return two voyages without fouling. The state of the bottom of the *Queen of the South* on her return from an Indian voyage, after the composition had been on upwards of six months without examination, was most satisfactory, and which is proved by the fact of this vessel having run 310 knots during the last 24 hours of her passage home UNDER SAIL ALONE. Wishing you much success in the general application of your useful invention, I am, &c.,

"General Screw Steam Shipping Company, 2, Royal Exchange-buildings, London, Dec. 28, 1852."

ON COPPER SHEATHING.

"Messrs. PEACOCK and BUCHAN.—We have made use of your Composition Paint for some time, and find it very serviceable, and well adapted for the purpose required.

"Yours, faithfully, GEO. and J. INMAN, Yacht Builders.

"Lymington, Nov. 4, 1852."

ON ZINC SHEATHING.

"Messrs. PEACOCK and BUCHAN, Southampton.—I have much pleasure in adding my testimony to the value of your Paint for Ships' Bottoms. The *C. T. Sutton*, under my command, was sheathed with Yelle Montagne zinc in June, and immediately after with your composition, and on my return from Newfoundland last week I find the SHEATHING PERFECTLY CLEAN, and FREE FROM BARNACLES and WEED, except in a few spots where the paint had been rubbed off; this more distinctly, I think, shows its value as a preservative against fouling. If we had had two coats, as was suggested, the success would have been more complete. I saw Messrs. Le Boulter's schooner, the *Adeline*, Capt. Pallot, in Gaspe, before she sailed for the Straits, and HER APPEARANCE WAS EVEN MORE SATISFACTORY than that of the *C. T. Sutton*; she was sheathed and painted in May. I beg to add that my confidence in this material is unbounded.

I am, Gentlemen, your obedient servant,
"Jersey, Dec. 17, 1852." "JOHN LE BRUN."

Messrs. PEACOCK and BUCHAN beg further to state, that their compositions are now ADOPTED by the following important Steam Navigation Companies:—

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

THE ROYAL MAIL STEAM PACKET COMPANY.

THE PACIFIC STEAM NAVIGATION COMPANY.

THE GENERAL SCREW STEAM SHIPPING COMPANY.

THE AUSTRIAN LLOYD'S.

THE AUSTRALIAN ROYAL MAIL STEAM COMPANY.

THE ABERDEEN AND CLYDE STEAM COMPANY.

THE AFRICAN STEAM NAVIGATION COMPANY.

THE SPANISH STEAM NAVIGATION COMPANY.

THE NORTH OF EUROPE STEAM NAVIGATION COMPANY.

THE NETHERLAND STEAM NAVIGATION COMPANY.

And by numerous shipbuilders and owners in the United Kingdom.

In order to ensure a PURE, GENUINE, and UNCORRUPTED ARTICLE (evidence having been given to Messrs. Peacock and Buchan of parties mixing other compounds with their composition), the public are requested to apply to the inventors, at their manufactory, Southampton, or to their AUTHORIZED AGENT, Mrs. TAYLOR, No. 104, MINORITIES, LONDON.

ASSAYING.—CITY SCHOOL OF CHEMISTRY AND ASSAY OFFICE, DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT.

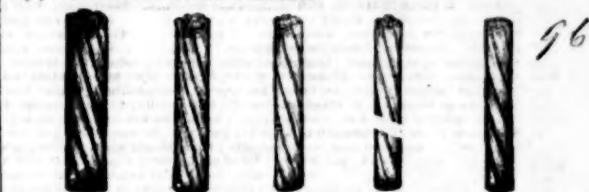
Conducted by JOHN MITCHELL, F.C.S., Author of *Manual of Practical Assaying*, *Manual of Agricultural Analysis*, *Treatise on the Adulteration of Food*, *Metallurgical Papers*, &c. ASSAYS AND ANALYSES of MINERALS, METALS, and every manufacturing product.

SPECIAL INSTRUCTION IN ASSAYING and CHEMISTRY for gentlemen intending to proceed to the colonies.

All enquiries respecting scale of fees, &c., to be addressed as above.

KUPER'S PATENT WIRE ROPES.

MR. HENRY J. MORTON, GALVANIZED AND CORRUGATED IRON ROOFING AND STRAND FENCING WORKS, 94, ALBION STREET, LEEDS, SOLE AGENT FOR KUPER'S PATENT WIRE ROPES, for mines, railways, inclines, &c. These ropes are now most extensively used throughout the whole of the mining districts of this kingdom; and reference can be given to the largest proprietors, as to their superiority over all other ropes. These ropes are made by improved machinery. All ropes sent carriage paid. PATENT GALVANIZED TWISTED SIGNAL CORD, for the use of mines, rail ways, &c., WILL NOT RUST OR CORRODE.



For mines they are very well adapted, as they will not rust or corrode, and are exceedingly strong. Prices, 15s., 18s., 19s. 6d., & 21s. per 100 yds., according to strength. PATENT HAIR BOILER FELT, for saving fuel, and ASPHALTED ROOFING FELT, 1d. per foot, supplied. Apply for prices, &c., at the manufactory, 94, Albion-street, Leeds.

IMPORTANT TO EMIGRANTS.—IRON HOUSES.

MR. HENRY J. MORTON, GALVANIZED IRON HOUSES, 94, ALBION STREET, LEEDS, MANUFACTURER OF IRON HOUSES and WAREHOUSES, for EXPORT to AUSTRALIA and the COLONIES. These buildings are exceedingly compact and light, and so that any one can put them together. Prices from £20, and upwards. The great value of house property in Australia and the Gold Regions renders it very important that emigrants should provide themselves with a portable building in this country.

PATENT ROOFING FELT, for roofing cottages, stores, &c. Price 1d. per square foot; very light and portable roofing. Thousands of yards are now being taken out to Australia by emigrants. Delivered CARriage FREE.—Apply at the manufactory, 94, Albion-street, Leeds.

MR. G. F. MUNTZ'S (JUN.) PATENT SOLID BRASS TUBES.

11½d. per lb., delivered in any part of the United Kingdom.—Is introducing these tubes to the notice of engineers and the public, the patentee respectfully directs their attention to some of the advantages which they possess over those previously in use:—

1st. Economy in the first cost.—2d. Greater durability, being made of a mixture of metal hard in its own nature, and not mechanically hardened, as ordinary brass tubes are, which renders them liable to split or burst when subjected to the expansion and contraction caused by the heating and cooling of the boiler.—3d. Equality of hardness throughout, the metal being sufficiently tough to bear expanding, when being in the boilers, without softening the ends, which is necessary in fixing the brass tubes previously in use, and which causes the softened parts to wear more.—4th. They are less liable to corrode than any mixture of brass which can be manufactured into tubes by the process previously employed.

G. F. Muntz's Patent Metal Company, French Walls, Birmingham, sole manufacturers.—Agents for London: Charles Moss and Co., 23, Fenchurch-street; Young, Dowson, and Co., Limehouse.—Bristol: E. Drew, Clifton Park.—Liverpool: C. Moss and Co., Redcross-street.

GALVANIZING WORKS.—SKAIFE'S PATENT GALVANIZED

IRON (superior process).—WORKS at the REGENT'S CANAL BASIN, COMMERCIAL ROAD, LIMEHOUSE, LONDON.—J. SKAIFE supplies this metal in every form—viz., SHEETS, PLAIN and CORRUGATED, of all sizes and gauges; WIRE of every gauge, and WIRE NETTING of all descriptions; GUTTERING; RAIN-WATER, SCREWED GAS and WATER-PIPES; HOOPING, CASTINGS, FURNACE-PANS, BATHS, BUCKETS, &c., wholesale, retail, and for export. Every description of SHIPS' IRONWORK GALVANIZED; DECK SPIRES, NAILS, &c., always KEPT READY GALVANIZED. Estimates and drawings given for roofs and buildings fixed complete.

J. SKAIFE is also AGENT for MOREWOOD and ROGERS'S PATENT GALVANIZED TINNED IRON, both flat and corrugated; also, for MOREWOOD and ROGERS'S PATENT GALVANIZED TINNED IRON TILES, for exportation, and PLUMBIC ZINC. PORTABLE EMIGRANTS' HOUSES and substantial stores supplied at moderate prices, and on the shortest notice. An allowance to the trade.

VENTILATION OF COAL MINES, &c.—NEW AND SIMPLE

ANEMOMETER.—This instrument is the INVENTION of Mr. DICKINSON, Government Inspector of Coal Mines; its construction is simple, it is extremely accurate, requires no allowance for friction, is easily read, and requires no timing.—Made by J. Casartelli, 43, Market-street, Manchester, where may be had also dial circumferencers, level, steam-gauges, &c.

MOUATIS'S WATER-RAISING APPARATUS.—This NEW

SYMPHON RAISES WATER to any required HEIGHT, and in any QUANTITY. A description of which may be obtained at the office of the *Mining Journal* (see the Number for the 9th October last, and others subsequently up to the 18th June). LICENSES to FIT UP this WATER-RAISING APPARATUS may be OBTAINED to any required extent on granting a per centage on the saving of power by this invention.—For further particulars, apply to Mr. Mouat, the patentee.

Earlston, N. B., June 28, 1853.

IMPROVED LIFTING JACKS.

MANUFACTURED BY W. AND J. GALLOWAY, PATENT RIVET WORKS, MANCHESTER.

The attention of parties who employ

Lifting Jacks,

Is respectfully requested to the superiority of those annexed, over those hitherto in use.

BLAKE AND PARKIN, MEADOW WORKS, SHEFFIELD.

MANUFACTURERS OF CIRCULAR AND MILL SAWS, IMPROVED CAST-STEEL FILES, for the use of engineers and machinists, PATENT TEMPERED MACHINE KNIVES and CUTTERS, manufactured for planing and grooving wood, for cutting paper, iron, stone, leather, &c., made to any pattern or dimensions with the utmost exactness. Warranted to work with a harder and finer edge than any other mode of temper.

INVENTORS OF CORE-ANNEALED CAST-STEEL for raps, piston-rods, &c.—MANUFACTURERS OF RAILWAY SPRINGS, BLISTER, SHEAR, and CAST-STEEL, &c.

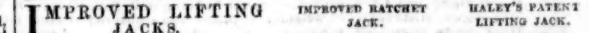
WILLIAM DRAY AND CO.'S NEW PATENT QUARTZ-CRUSHING MACHINE.

FULL PARTICULARS may be obtained on application to Messrs. Wm. DRAY & Co., Engineers, Swan-lane, Upper Thames-street.

UNDER THE PATRONAGE OF THE QUEEN, AND THE PRINCIPAL NOBILITY.

ROPER'S ROYAL BATH PLASTERS supersede the use of inward medicines for Coughs, Asthma, Hoarseness, Indigestion, Palpitation of the Heart, Croup, Hooping-cough, Influenza, Chronic Strains, Bruises, Lambo, Spinal and Rheumatic Affections, Diseases of the Chest, and Local Pains. These truly invaluable plasters are compounded on medico-chemical principles, from British herbs, and gums and balsams of Eastern climes; have the words "ROPER'S ROYAL BATH PLASTER" engraved on the Government stamp; and signed on the back "ROPER'S ROYAL BATH PLASTER". Prepared only by Robert Roper and Son, Chemists, Sheffield, who possess a large number of testimonials, from highly respectable parties, of cures effected in numerous varieties of the above diseases. Full sized plasters, 1s. 1½d. for children, 9½d. each; or direct by post on receipt of 1s. 4d., or 1s. each; and in time for the use of hospitals, unions, family use, and charitable purposes, at 6d., 2½d., and 3½d. Sold by most medicine vendors.

Beware of Imitations.—Ask for ROPER'S PLASTER.



THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120	Alfred Consols (copper), Phylack	£1 10s	10s	20 20%	£7 2 0	£0 13 0—May, 1853.
3000	Angloes Coal Company	4s	4s	4s	0 10 0	0 2 0—Nov., 1852.
624	Ballewidden (tin), St. Just	11s	10s	11 15 0	0 8 0	0 8 0—June, 1853.
5000	Bat Holes, Worthen, Salop	17 13s 6d	17s	0 10 0	0 10 0	0 10 0—April, 1853.
4000	Batford United (copper), Tavistock	2s	2s	4 18 0	0 4 0	0 4 0—June, 1853.
5000	Black Craig (lead), Kirkcubrightshire	5s	4s	0 2 0	0 2 0	0 2 0—Nov., 1851.
64	Boswell Down (tin), St. Just	—	12s	—	—	—
124	Bowdell and Wheel Castle	—	—	—	—	—
20	Botallack (tin, copper), St. Just	91s	40s	—	—	—
1890	Byatalak, Llanidloes, Montgomeryshire	7s	—	—	—	—
5000	Callington (lead, copper), Callington	7s 12s	7s	—	—	—
1000	Carn Irea (copper, tin), Illogan	15s	7s	—	—	—
128	Comford (copper), Gwynnapp, Cornwall	7s	—	—	—	—
256	Conduff (copper, tin), Camborne	20s	11s	127s	—	—
3510	Cook's Kitchen (copper, tin), Illogan	15s	1s	—	—	—
3512	Cwmystwith (lead), Cardiganshire	60s	19s	—	—	—
1024	Devon Great Consols (copper), Tavistock	1s	38s	38s	—	—
30000	Dhurood (copper), Ireland	1s	1s	—	—	—
672	Ding-Dong (tin), Gwilt	5s	6s	—	—	—
179	Dolcoath (copper, tin), Camborne	25s	2s	—	—	—
12900	Drake Walls (tin, copper), Calstock	17 9s	9s	—	—	—
300	East Darwen (lead), Cardiganshire	28s	10s	—	—	—
128	East Pool (tin, copper), Pool, Illogan	24s	6s	—	—	—
84	East Wheel Croft (copper), Illogan	12s	6s	—	—	—
128	East Wheel Rose (silver-lead), Newlyn	50s	25s	20s	—	—
494	Fowey Consols (copper), Tywardreath	40s	30s	—	—	—
3715	General Mining Co. for Ireland (cop., lead)	1s	5s	5s	—	—
1000	Goginan (copper), Cardiganshire, Wales	8s	20s	—	—	—
1000	(New) ditto	12s	18s	—	—	—
1024	Gonama (copper), St. Cleer	12s	7s	—	—	—
96	Great Consols (copper), Gwynnapp	1000s	200s	—	—	—
50000	Great Onslow Consols, Camelford	1s	—	—	—	—
17530	Great Polgooth (tin), St. Austell	3s	2s	—	—	—
119	Great Work (tin), Gernoe	100s	15s	—	—	—
1024	Herodsfoot (lead), near Liskeard	5s	13s	12	—	—
1000	Holmshush (lead, copper), Callington	25s	14s	—	—	—
3000	Holyford (copper), near Tipperary	11s	7s	—	—	—
76	Jamaica (lead), Mold, Flintshire	3s 13s 6d	20s	—	—	—
788	Kirkcubrightshire (lead), Kirkcubright	9s	4s	—	—	—
30000	Lackmore (copper)	1s	1s	1 1s	—	—
20	Laxey Mining Company, Isle of Man	100s	130s	—	—	—
1000	Lewis (tin, copper), St. Erth	12s	10s	—	—	—
1000	Levant (copper, tin), St. Just	1s	1s	—	—	—
400	Lisborne (lead), Cardiganshire, Wales	18s	22s	—	—	—
4000	Marke Valley (copper), Caradon	4s 10s 6d	5s	—	—	—
5000	Mendip Hills (lead), Somerset	3s	7s	—	—	—
5000	Merilyn (lead), Flint	2s	4s	—	—	—
5000	Milwr (lead), Flintshire	3s	3s	—	—	—
30000	Mining Co. of Ireland (copper, lead, coal)	7s	17s	10 16s	—	—
5000	Nantlle Vale (lead), Llanfyllin	1s	1s	—	—	—
470	Newtonards Mining Company, Co. Down	50s	6s	—	—	—
300	North Pool (copper, tin), Pool	22s	27s	—	—	—
140	North Roskear (copper), Camborne	10s	13s	—	—	—
6000	North Wheel Basset (copper, tin), Illogan	nd.	8s	—	—	—
5400	Par Consols (copper), St. Blazey	1s	15s	14	—	—
500	Peak United (lead), North Derbyshire	—	—	—	—	—
1130	Perran St. George (copper), Cornwall	21s	40s	—	—	—
200	Phonix (copper, tin), Linkingborne	30s	75s	—	—	—
1000	Polbrock (tin), St. Agnes	15s	13s	—	—	—
500	Providence Mines (tin), Ury Lelant	20s	35s	—	—	—
1948	Rix Hill (tin), Tavistock	3s	2s	—	—	—
5200	Rorington (lead), Shalbeach, Shrewsbury	1s	1s	—	—	—
256	South Caradon (copper), St. Cleer	2s	21s	20s 21s	—	—
9000	South Tamar (silver-lead), Beerferris	1s	6s	—	—	—
256	South Tolgus (copper), Redruth, Cornwall	16s	18s	—	—	—
248	South Wheel Frances (copper), Illogan	37s	18s	—	—	—
1024	Spearer Consols (tin), St. Just, Cornwall	1s	10s	—	—	—
1024	St. Aubyn and Grylls (copper, tin), Breage	—	—	—	—	—
84	St. Ives Consols (tin), St. Ives	80s	12s	—	—	—
1000	Stray Park and Camborne Vein (copper)	10s	12s	—	—	—
9000	Tamar Consols (silver-lead), Beeralston	4s	2s	2 2s	—	—
6000	Tinctor (copper, tin), near Pool, Illogan	7s	7s	6s 9s	—	—
1024	Trehan (silver-lead), Menheniot	1s	13s	11 12	—	—
5000	Treleigh Consols (copper), Redruth	6s	2s	—	—	—
372	Trelyn Consols (tin), St. Ives	6s	2s	—	—	—
96	Trevelan (copper), Gwynnapp, Cornwall	32s	20s	—	—	—
120	Trevelan (copper), Gwynnapp, Cornwall	5s	17s	—	—	—
120	Trevelan and Barriar (copper), Gwynnapp	13s	5s	—	—	—
100	Trumpet Consols (tin), near Helston	9s	5s	—	—	—
400	United Mines (copper), Gwynnapp	40s	28s	—	—	—
1024	Wellington (copper, tin), Perranuthnoe	8s	7s	—	—	—
256	West Caradon (copper), Liskeard	20s	24s	24s 25s	—	—
1024	West Providence (tin), St. Erth	1s	5s	4s 47	—	—
1024	West Wheel Treasury (copper)	10s 4s 10s	10s	—	—	—
256	Wheel Basset (copper), Illogan	10s	62s	63s	—	—
256	Wheel Brewer (copper), Gwynnapp	4s	22s	—	—	—
256	Wheel Buller (copper), Redruth	5s	10s	—	—	—
256	Wheel Clifford (copper), Gwynnapp	—	15s	—	—	—
4250	Wheel Exmouth and Adams United	4s	8s	—	—	—
100	Wheel Friendly (tin), St. Agnes	70s	10s	—	—	—
128	Wheel Friendship (copper), Devon	12s	10s	—	—	—
4000	Wheel Golden (all-lead), Perranuthnoe	3s	3s	—	—	—
4000	Wheel James (iron, copper), Roche	nil.	20s	—	—	—
312	Wheel Jane (silver-lead), Kna	33s	50s	—	—	—
430	Wheel Level (tin), Wendron	33s	50s	—	—	—
112	Wheel Margaret (tin), Ury Lelant	79s	117s	—	—	—
512	Wheel Mary Ann (lead), Menheniot	5s	38s	—	—	—
80	Wheel Owles, St. Just, Cornwall	70s	30s	—	—	—
6400	Wheel Procter (lead & antimony), St. Kew	20s	1s	—	—	—
240	Wheel Reeth (tin), Cardiganshire	20s	20s	—	—	—
198	Wheel Seta (tin, copper), Camborne	107s	27s	—	—	—
320	Wheel Trevelan (silver-lead), Liskeard	8s	6s	—	—	—
1024	Wheel Trevelan (tin, copper), Gwynnapp	9s	21s	—	—	—
5000	Wicklow (copper), Wicklow	5s	60s	60	—	—

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
72000	Alten Mining Company (copper), Norway	£14s	7s	—	3 10 0	0 10 0—Dec., 1852.
10000	Baden, Grand Duchy of	1s	1s	1s	0 10 0	0 10 0—Nov., 1852.
10000	Barras Imperial (gold), Brazil	25s	4s	4s	34 17 0	0 10 0—Dec., 1852.
2484	Barras Imperial (gold), Brazil	5s	12s	—	135 0 0	0 10 0—Dec., 1852.
12000	Cobre Copper Company (copper), Cuba	40s	47s	47	56 13 0	0 10 0—Dec., 1852.
10000	Copiapu Mining Company (copper), Chili	15s	10s	—	3 18 0	0 10 0—Dec., 1852.
30000	General Min. Assoc. (iron, coal), Nova Scotia	20s	18s	9s	0 13 0	0 10 0—April, 1853.
10000	Linares (lead), Pozo Ancho, Spain	2s	2s	—	4 0 0	0 10 0—Nov., 1852.
2700	Marmato (gold), Colombia	2s	12s	—	0 10 0	0 10 0—Jan., 1853.
50000	Marquitas and New Granada	1s	—	—	4 17 0	0 10 0—July, 1848.
7000	Mexican and South American (cop.), Mexico	9s	7s	7s	33 4 0	0 10 0—April, 1853.
11000	Royal Santiago (copper), Cuba	12s	5s	5s	21 17 0	0 10 0—April, 1853.
11000	St. John del Rey (gold), Brazil	15s	34s	34s	1 16 0	0 10 0—Feb., 1853.
43174	United Mexican (silver), Mexico	AV.	2s	—	—	—

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
75000	Adelaide Land and Gold Comp.	2s	1s	1 1s	—	—
19000	Australian (cop.), S. Australia	5s	2s	3s	—	—
6000	Barossa Range	1s	—	—	—	—
75000	Brucuta (gold), Brazil	1s	1s	—	—	—
4000	Gladsbach (zinc)	1s	1s	—	—	—
10000	Jamaica (copper), Jamaica	3s	2s	3s	—	—
2300	Kinsale (tin), S. Germany	3s	2s	3s	—	—
24000	Liquanea & Gen. Min. Co. of Ja.	1s	1s	1 1s	—	—

MINES WHICH HAVE SOLD ORES.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
4000	Alston Moor Mining Co., Cumb.	1s	1s	—	—	—
30000	Altarnun Cons. (tin, cop.), Altar.	2s	2s	—	—	—
600	Allgäu Consols (lead, quarry)	2s	2s	—	—	—
4000	Angloes Coal (cop.), Bridport	2s 6d	2s 6d	—	—	—
940	Bainoon Cons. (tin), Ury Lelant	9s	9s	—	—	—
4096	Ball-swidden United	1s	1s	—	—	—
508	Bell and Larnach, Gwynnapp	10s	16s	16	—	—
9000	Bleaton Consols (lead), St. Ives	1s	1s	—	—	—
10000	Birch Tor and Viller, Lydford	2s	1s	—	—	—
6000	Bischoptone, Glynferrys, 17 19s	1s	1s	—	—	—
120	Bodmin Cons. (lead), Wadebridge	12s	7s	—	—	—
144	Bodmin West Down (tin, cop.)	1s	1s	—	—	—
730	Bodmin and Nanpan (tin)	20s	18s	—	—	—
4996	Boringdon Consols, Plymouth	8s 6d	8s	—	—	—
340	Bosora (tin), St. Just	3s	20s	20s	—	—
2400	Bosora (tin), St. Just	3s	3s	—	—	—
2520	Bottle Hill (copper), Plymouth	2s	—	—	—	—
4946	Braich Goch Slate Quarries	—	—	—	—	—
4250	Brondy (lead), Wales	—	—	—	—	—
2390	Bryn-Arian (lead), Cardiganshire	—	—	—	—	—
—	Budack Consols (tin), Perran	—	—	—	—	—
500	Busparvo (tin, cop.), Gwynnapp	1s	1s	—	—	—
2000	Rwch (all-lead), Cardiganshire	4s	3s	—	—	—
5000	Cae-Gwynn, Cardiganshire	4s	1s	—	—	—
1024	Campilly & Carnon, S. Wales	3s	4s	—	—	—
3000	Cally (cop., lead), Kirkcubright	4s 1s	—	—	—	—
4000	Calstock Consols (copper)	3s	2s	—	—	—
4000	Calstock United (cop.)	3s	2s	—	—	—
1024	Cardon Consols, St. Cleer	3s	2s	—	—	—
2000	Carbons (tin, copper), Crown	8s	2s	—	—	—
2048	Carnyorth (tin), St. Just	1s	1s	—	—	—
1056	Carrannall (copper), Gwynnapp	5s 1s	5s	—	—	—
2048	Cass Dinas (tin), St. Colomb	2s	1s	—	—	—
200	Cefn Brynno (lead), Cardiganshire	3s	11s	—	—	—
5000	Charlestown United, Cornwall	1s	1s	—	—	—
2048	Clare	1s	1s	—	—	—
1024	Clijack & Westworth (tin, cop.)	4s	10s	—	—	—

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
1024	East Wheel Margaret (tin, cop.)	2 1/2	15	12	—	—
4000	East Wheel Russell, Tavistock	2 1/2	15	12	—	—
564	Eaton Mountain, Derbyshire	10	12	—	—	—
536	Eaton Mountain (lead, copper)	5	5	—	—	—
1200	Espar Lee, Llanfyllin, 3 17s	17	—	—	—	—
32	Four Dargue (lead) Cumberland	12	4	—	—	—
2000	Galt-y-Maen, Merioneth	1	1	—	—	—
2000	Gedra (lead), Flint	3	3	—	—	—
2048	Gedra (lead), Flint	3	3	—	—	—
2500	Georgia Consols (tin), St. Ives	5	3	5	—	—
12000	Gorn (lead), Llanidloes	12	—	—	—	—
243	Grambler & St. Aubyn (copper)	94	30	—	—	—
900	Great Beam (tin), St. Austell	20	24	—	—	—
6754	Great Bryn Consols (cop., tin)	1	1	—	—	—
4000	Great Cwarch, Merioneth	5	2	1	—	—
2000	Great Cwarch (copper)	5	2	1	—	—
1024	Great Wheel Alfred, Phylack	20	29	29	—	—
5120	Great Wheel Badden (tin)	2	1	1	—	—
300000	Gt. Wh. Vor (tin, cop.), Helston	1	1	1	—	—
1024	Gustaves Mines, Camb. 34	114	3	1	—	—
512	Halamaning and Croft Gt. 84	60	—	—	—	—
512	Hawke's Point, Uny Lelant	5	3	—	—	—
1592	Hawknor (tin & cop., Calstock	5	1	1	—	—
1000	Hennock (silver-lead) Hennock	7	7	—	—	—
6000	Hingson Down Cons. (copper)	2 1/2	5	—	—	—
30000	Kenmare and West of Ireland	1	1	—	—	—
1024	Kennegry (copper), Breaque	24	24	—	—	—
1200	Kewick (lead), Fortingally	10	10	9 10	—	—
1000	Killick (lead), Clack	4	3	—	—	—
1698	Lamherose Wheel Maria (cop.)	15	3	—	—	—
1024	La Min (copper), Gwinaer	20	3	3	—	—
252	Lanarth Con. (cop.), Gwennap	4	4	—	—	—
1024	Leeds and St. Aubyn (tin, cop.)	1 1/2	2	—	—	—
12000	Leeds Town (tin, cop.), Crovan	2 1/2	2	—	—	—
256	Lelant Consols (tin), Uny Lelant	6 1/2	20	—	—	—
10000	Llynvaude (lead), Cardigan	1 1/2	1	—	—	—
4000	Lovedale United (lead), Cardigan	1 1/2	1	—	—	—
3054	Lynard Consols (lead), Cardigan	17	3	—	—	—
1024	Melin Llyn-y-Pair, Merioneth	2 1/2	6	—	—	—
246	Mengearne and Tregrunat (tin)	8	8	8	—	—
4096	Middleton (lead), Snailbeach	4	—	—	—	—
1024	Mill Pool (tin, cop.), St. Hilary	5	7	6	—	—
7500	Mixon Great Cons. (cop.), Leek	3	1 1/2	—	—	—
10000	Molland (cop.), South Moulton	10	—	—	—	—
1024	Mount Flack (tin, cop.), Lelant	2	—	—	—	—
730	Nanasegued (tin), Camborne	14	12	—	—	—
5002	Nance and St. Austell	1	1	—	—	—
3000	Nant-y-Car (cop., nr. Rhayader)	4	7	—	—	—
1024	North Abram (copper), Crovan	1	1	1	—	—
1024	North Buller (copper), Redruth	8 1/2	6	—	—	—
6000	North Damsel (cop.), Gwennap	1	1	1 1/2	—	—
1024	North Ding Dong (tin), Madron	1	2	2 1/2	3	—
2000	North Downs (copper), Redruth	2	—	—	—	—
2500	North Frances (copper), St. Austell	4	2	5	—	—
2000	North Levant (tin, cop.), Madron	1	1	5	—	—
2000	North Tamar (silver-lead, cop.)	1	1	—	—	—
1200	N. W. Buller, or Gt. South Tolgus	8 1/2	11	—	—	—
1024	North Wh. Robert, Walmatton	6 1/2	8	—	—	—
3000	N. Wh. Unity (cop., tin), Gwin.	1	3 1/2	2 1/2	—	—
2000	Oekmont (cop., sil.-lead), Devon	1 1/2	1 1/2	—	—	—
3048	Okel Tor (lead), Calstock	2 1/2	1 1/2	—	—	—
256	Old Wheel Basset, Illogan	4	5	4	—	—
2500	Oresed (lead), Flint	1 1/2	2 1/2	—	—	—
10240	Pembroke & East Cornwall (cop.)	4	4	—	—	—
1500	Pendralg (lead), Madron	1	1	—	—	—
6000	Pendarves & St. Aubyn (tin, cop.)	21	3	—	—	—
1026	Pendarves Consols, Camborne	6 1/2	1 1/2	—	—	—
5000	Penhale Consols (silver-lead)	3 1/2	4	—	—	—
640	Pen-y-Gelli (lead), Flintshire	4	25	—	—	—
3022	Penzance Con. (tin), Saneered	38	4	—	—	—
1000	Peter Tavy & Mary Tavy (cop.)	5 1/2	6	5	—	—
2000	Polgar & Lannarrow (cop., tin)	2	1 1/2	—	—	—
2400	Porkeils United (tin), Weddon	2	10	8	—	—
1024	Prad Con. (tin), Llanidloes	1 1/2	4	—	—	—
6400	Prideaux Wood, Llanfyllin	1 1/2	4	—	—	—
3072	Prince Albert, Ferranzabulo	2 1/2	1 1/2	—	—	—
480	Raleigh, (tin, copper), Crovan	2	7 1/2	—	—	—
7000	Reeth Consolidated, Towanack	4	1 1/2	—	—	—
10000	Respyr (copper), Lostwithiel	2	2	2	—	—
2500	Rhoswydol & Bacheildon (tin)	1 1/2	15	12	—	—
10000	Rinks United	1	1	2 1/2	—	—
5000	Roche and Treverbyn (tin)	12	12	2	—	—
5000	Rodney Hill, Salsp	10	12	10	—	—
5000	Round Hill, Salsp	10	12	10	—	—
1024	Sidney Goldolph (cop.), Breaque	23	14	10	—	—
4000	Sithney Wheel Buller (tin)	1	5	4	—	—
1500	Skidway & Blenethers, Kewick	1 1/2	2 1/2	—	—	—
2000	South Carn Brea (cop.), Illogan	1 1/2	10	10	—	—
256	South Charlotte, St. Agnes	3	14	10	—	—
5000	South Crenver (copper)	2 1/2	5	4 1/2	—	—
4196	South Friendship Wheel Ann	2 1/2	2	—	—	—
3000	South of Scotland	2 1/2	2	—	—	—
3500	South Speed, Leek	3	—	—	—	—
4096	South Wheel Yeoland	3	—	—	—	—
280	Spearne Moor (copper), St. Just	30	30	—	—	—
128	St. Blazey Consols, St. Blazey	67 1/2	—	—	—	—
3000	St. Day United (tin & cop.)	2	3 1/2	2 1/2	—	—
512	St. Michael Penkell (tin)	2 1/2	1 1/2	—	—	—
999	St. Minver Consols (silver-lead)	1	1	—	—	—
1200	Swanpool, Bodock	6 1/2	20	7 1/2	—	—
20000	Tassan (lead), Ireland	—	—	—	—	—
4944	Tavy Con. (cop.), near Tavistock	15	3 1/2	—	—	—
4900	Tees Side (lead), Cumberland	2 1/2	2 1/2	2 1/2	—	—
1000	Tolkenbury Con. (cop.), St. Ives	3 1/2	4	—	—	—
1024	Trebrag Con. (tin), St. Erth	1	1	—	—	—
4900	Trebrag Con. (tin), St. Erth	1	1	—	—	—
1024	Trebrag Con. (tin), St. Erth	1	1	—	—	—
4096	Trebrag United (lead) St. Teath	3 1/2	2 1/2	2 1/2	—	—
600	Tregardock (lead), St. Teath	5	15	—	—	—
145	Treigorden, Wadebridge	23	5	—	—	—
4096	Trebell Con. (tin, cop.), Lanivet	1	1	—	—	—
10000	Treloggan, St. Colomb Minor	1 1/2	2	—	—	—
5000	Treneweth (cop.), St. Erth	10	1	—	—	—
10000	Trevelyan (copper), Borth	1 1/2	1 1/2	1 1/2	—	—
2048	Trevelyan (tin, copper)	3 1/2	1 1/2	—	—	—
2500	Trevenen (tin), Wendron	1	1 1/2	—	—	—
4000	Tryn-y-Worgold (plate), Carnar.	4 1/2	4	—	—	—
10000	Tyn-y-berth (plate)	1	1 1/2	—	—	—
5000	Ulpha United Mines, Cumberl.	7	2	—	—	—
3000	Union (tin), Mocho & Lanthion	1	2 1/2	1 1/2	—	—
20000	Valley of Towy (lead)	1	1 1/2	—	—	—
2000	West Aberffwyd, Cardigan	10	4	—	—	—
1024	West Abraham (cop.), Gwennap	14	8	—	—	—
1024	West Alfred (lead), Phylack	4 1/2	2 1/2	—	—	—
6000	West Basset (copper), Illogan	1 1/2	14 1/2	12	—	—
2500	West Crennis, St. Austell	2	2 1/2	2	—	—
256	West Damsel (cop.), Gwennap	10 1/2	14 1/2	15	—	—
1024	West Ding-Dong (tin), Saneered	4	15	—	—	—
6040	West Fowey Con. (tin, cop.)	26	0	8 1/2	—	—
2048	West Gwynn, Cardiganshire	4 1/2	8 1/2	—	—	—
2500	West Far Con. (tin), St. Blazey	1	1	—	—	—
650	West Folegeton (cop.), St. Erth	1	1	—	—	—
200	West Seton (copper), Camborn	7	24 1/2	—	—	—
120	West Tolgus (copper), Illogan	14 1/2	8 1/2	—	—	—
940	West Trethellan, Gwennap	13	11	—	—	—
5000	West Wheel Alfred (cop.), Hayle	3	3 1/2	—	—	—
1024	West Wheel Darlington	212	18	10	—	—
512	West Wheel Frances, Illogan	10 1/2	7	—	—	—
4000	West Wheel Russell, Calstock	1	2 1/2	2	—	—
500	West Wheel Town (cop., tin)	3 1/2	25	—	—	—
1000	Wheel Agar (copper), Illogan	6	1 1/2	—	—	—
6400	Wheel Arthur (cop.), St. Austell	1	1	—	—	—
1228	Wheel Arthur (cop.), Calstock	9	23	23	—	—
3072	Wheel Augusta (tin), St. Just	1 1/2	2 1/2	2	—	—
200	Wheel Bal (tin), St. Just	6 1/2	5	—	—	—
530	Wheel Carne (tin), St. Just	8	7 1/2	—	—	—
1024	Wheel Carpenter (tin), Gwinaer	3	8	7	—	—
1024	Wheel Carpenter, S. Sydenham	6	15	12	—	—
1024	Wheel Chiverton (tin), St. Erth	17	9	0	—	—
912	Wheel Constance (lead), St. Erth	11	25	—	—	—
4000	Wheel Crennis, St. Austell	2	2 1/2	—	—	—
1024	Wheel Cupid (copper), Gwennap	5	10	8	—	—
4500	Wheel Elizabeth (tin), St. Erth	3	8	—	—	—
1092	Wheel Ennis (lead), St. Erth	3 1/2	4 1/2	4	—	—
1020	Wheel Enys (tin), Wendron	25	7	8	—	—
764	Wheel Gwenn, near Tavistock	16 1/2	11	10	—	—
6000	Wheel Grenville, Camborne	3	3 1/2	—	—	—
10000	Wheel Gurnus (tin, copper)	11 1/2	1 1/2	2	—	—
5120	Wheel Harris (tin), Uny Lelant	3	6	7	—	—
1000	Wheel Lemon (copper), Germoe	2	5	—	—	—
6144	Wheel Maudlin, Llanfyllin	1	1	—	—	—
942	Wheel May (silver-lead, cop.)	4	3	—	—	—
512	Wheel Montague (tin)	5 1/2	12	—	—	—
256	Wheel Music (copper), St. Agnes	1	1	—	—	—
1024	Wheel Neptune, Ferraouth, St. Erth	15	17	5	—	—
868	Wheel Oak (tin), near Helston	1	1	—	—	—
1000	Wheel Penty (tin), Redruth	50	50	—	—	—
1000	Wheel Prudence (cop.), St. Agnes	4 1/2	2	—	—	—
4000	Wh. Robert, Sampford Spiney	1	1	—	—	—
2048	Wheel Robins (tin) Liskeard	23	5	6	—	—
4000	Wheel Russell (cop.), Tavistock	2	4 1/2	—	—	—
5000	Wheel Ruth (tin), Sheperton	2	1	—	—	—
1024	Wheel Sidney, Plympton	5	10	—	—	—
512	Wheel Sophia (sil.-lead), Lelant	11 1/2	11 1/2	—	—	—
1024	Wheel Spredwell (copper), tin, St. Erth	15	9	10	—	—
1000	Wheel Squid (cop.), St. Erth	12	12	—	—	—
1000	Wheel Susan, Brea & Crovan	23	10	5	—	—
4000	Wheel Tehidy (copper), Illogan	1 1/2	4 1/2	4 1/2	—	—
4000	Wheel Trevaun (copper), tin	1	1	—	—	—
512	Wheel Trevaun (cop.), Gwennap	14 1/2	16	—	—	—
3000	Wheel Trevena (tin), Breaque	3 1/2	7 1/2	7	—	—
8448	Wheel Trevena (silver-lead)	3	2	—	—	—
1000	Wheel Tryphena, Camborne	10 1/2	3 1/2	—	—	—
6000	Wheel Unity (cop., tin), Gwinaer	5	1	—	—	—
1024	Wheel Uny (tin, cop.), Redruth	1	1	—	—	—
4000	Wheel Venton (sil.-lead), Liskeard	7 1/2	1 1/2	—	—	—
4000	Wheel Williams (copper)	1 1/2	8 1/2	—	—	—
4096	Wheel Zim (cop., lead), Calstock	3	4 1/2	—	—	—
4040	Whitford (lead), Flint	4	1	—	—	—
4096	Wood Mine	11	3d	—	—	—
4000	Yeoland Consols (tin, cop.)	4	5 1/2	—	—	—